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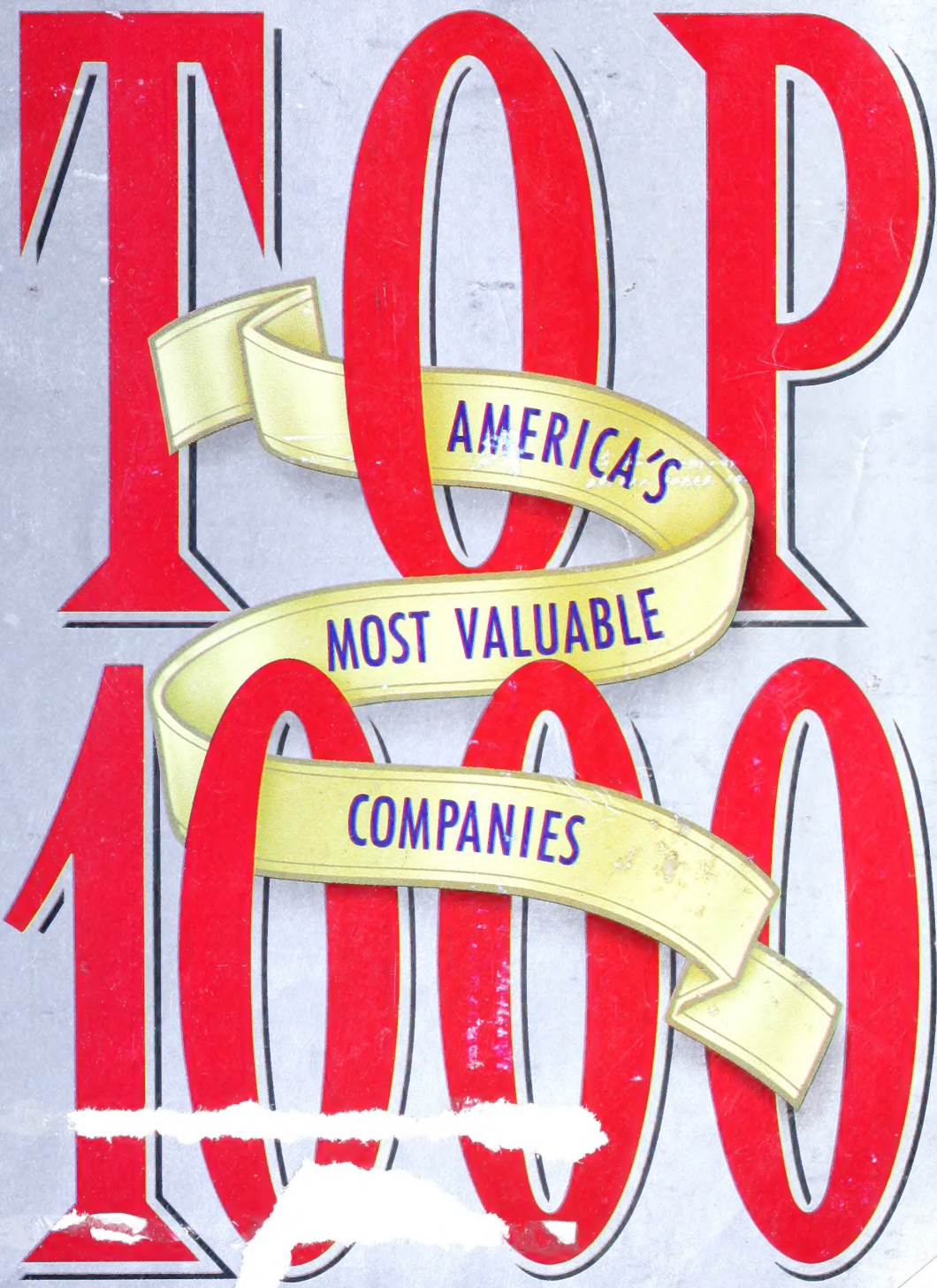
BusinessWeek

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THE BUSINESS WEEK

TOP 1000



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RANK IN
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FOR 1989
EARNINGS

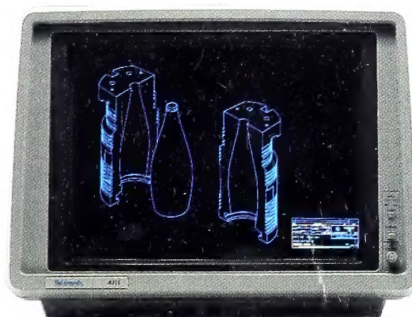
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A GUIDE
TO BIG
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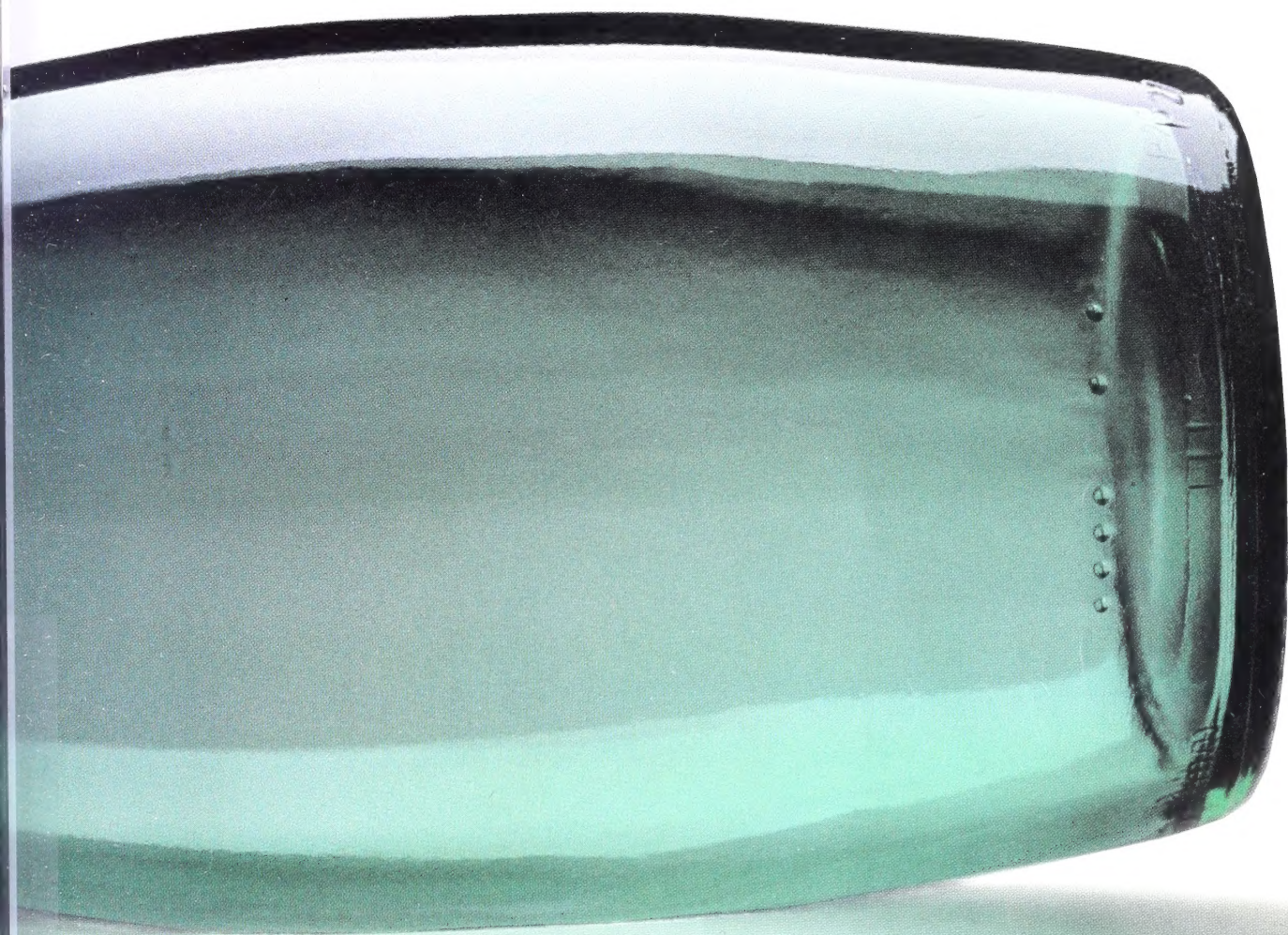
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Texas Rangers Find Santa Anna's Army, 1847. Ezra Tucker, 1989



r lance points, bayonets and insignia. Even subtle
is, like a discarded pack of cards, were useful in re-
ling the recent passage of large bodies of infantry.
This thorough collection of intelligence finally paid
or Taylor at the Battle of Buena Vista. Alerted by his
rgers of the approach of Santa Anna's army, Taylor fell
k to a strong position, laced with ravines to break up
assault formations of the enemy. When the Mexicans
cked, their superior numbers were unavailing against
American defenses. Santa Anna retreated, his last
hope of defeating the Americans broken.
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rgers. Those very skills, in fact, are among man-
d's oldest, going all the way back to our prehistoric
estors. But the Rangers demonstrated again how the
t is so vital in the realm of conflict.
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Some of these bosses had great years and are looking for more worlds to conquer. But most are on the hot seat in one way or another—fighting off a raider here, battling a marketing setback there. All are making news

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Foreign buyers flooded in, and raiders from past years made new deals, often to help pay off the old ones

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Here's a list of companies that the Street is really down on. The trick is to bag the bargains and dodge the dogs



THE MERCEDES-BENZ 300 CLASS: TURNING THE THEORETICAL INTO THE PHENOMENAL.

It is not entirely inaccurate to think of Mercedes-Benz cars as the handiwork of a scientific research center that happens to build automobiles.

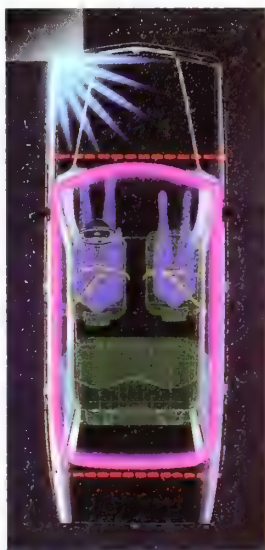
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MEMO



he BUSINESS WEEK 1000 is now into its fourth year of reporting on America's most valuable companies. Since the project was launched in 1986, U.S. corporate enterprise has been rocked by massive change: The stock market crashed. Real estate and energy prices swooned. A weakening dollar encouraged an influx of foreign investors. A tidal wave of mergers, takeovers, and restructuring engulfed entire industries.

Despite such upheaval, some things have remained constant. Consider the rankings at the top of the BUSINESS WEEK 1000 roster. Even though its market value is down sharply from four years ago, IBM still leads the pack. Exxon is still second, though its value is up sharply. And General Electric, having acquired both Kidder Peabody and RCA, still ranks third. With a market value of more than \$40 billion, GE is ahead of fourth-ranked AT&T by a cool \$6 billion. When numbers get this big, they tend not to fluctuate wildly.

But don't let this stability fool you. The

BUSINESS WEEK 1000 is by no means static. Four years ago, for example, the roster of Little Giants—companies with sales of less than \$100 million—was chockful of biotech firms. But cloning and gene splicing haven't proven to be as profitable as optimists once hoped, and now many of these are gone from the list. Their replacements? Cellular telephony is today's hot ticket, and companies such as Contel Cellular and Associated Communications are making impressive debuts.

This marriage of stability and change is part of the appeal of the BUSINESS WEEK 1000. The list mirrors the evolving economy. While much of Corporate America remains the same from one year to the next, at the margin nearly everything is changing. That's why movement on this list is a handy index of corporate vitality.

Pulling together these statistics was a massive job. The issue was supervised by Senior Editor Ephraim Lewis with the help of more than 40 staffers. Markets & Investments Editor Gary Weiss wrote the cover story, while Senior Writer Judy Dobrzynski turned out the

The Top 1000 team.

Seated, from left:

Mims, Lewis, Leach.

Standing: Bloom,

Lester, Zellner, Mead,

Worley, Farrell,

Weiss, Dobrzynski,

Hansen, Lippmann

roduction to the rankings of the 200
rgeest mergers. This year, the tables
clude a list of the top 20 mergers
itiated in 1988 but either completed in
89 or pending. That let us record
ich blockbusters as RJR Nabisco.

The Undervalued 200 introduction
as written by Corporate Finance Edi-
or Chris Farrell, while Detroit corre-
spondent Wendy Zellner was responsi-
ble for the photo essay on Kellogg.
With the help of a dozen BUSINESS
WEEK regional bureaus, People Editor
eter Finch edited the 25 Executives to
atch, whose companies continued to
ake news right up to deadline. Harris
ollingwood, Marc Frons, and Andrea
othman helped out with the editing.

The issue was designed by Molly
each, a talented magazine art director
who has worked before on this maga-
ine's special issues. She was assisted
y Jeri Hansen. BUSINESS WEEK's art
irector, Malcolm Frouman, looked
ver their shoulders.

As usual in a statistical enterprise of
his size, the heaviest burdens are
orne by the people who develop and
rocess the figures. Standard & Poor's
ompustat Services, like BUSINESS
WEEK a unit of McGraw-Hill, maintains
hat is probably the nation's largest
ank of financial data on U.S. public
orporations. In the space of a couple
f days, Compustat delivers to us an
stonishing package of statistics,
which constitutes the heart of the sta-
tistical tables. From then on, it's the
ob of Scoreboards Editor Bob Mims to
whip the data into publishable form.
The round-the-clock labor of translat-
ing the numbers into pages of print fell
o John Williams, BUSINESS WEEK's di-
rector of editorial operations, and pro-
duction editors Barbara Mead and
Claire Worley. Steve Romanoff, as
usual, read every number and word for
accuracy, and Mary Lee Schneider and
Craig Socia followed the whole pack-
age through the printing process. Pho-
tography was supervised by Sue
Bloom and Larry Lippmann of our pho-
to department. My thanks to all.

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AMERICA'S MOST VALUABLE COMPANIES

WALL STREET DOESN'T BRUISE EASILY. IF nothing else, the events of the past few years have proven that the markets can take their lumps—from Bloody Monday, the economic number *du jour*, or the insider trading scandals. The business of putting a price on Corporate America goes on pretty much as usual.

Considering the reduced expectations and fears of economic apocalypse that followed the crash, it's remarkable how well public companies have done. Profits have risen with unforeseen power, and corporate managers have continued to restructure with abandon, thereby "maximizing shareholder value"—as well as their own net worth.

One can inveigh against the evils of mergers and darkly predict an earnings-bashing recession. But in industry after industry a combination of profit recovery and takeover fever has genuinely enriched common shareholders, if not the commonweal. Bankers and publishers, consumer products manufacturers and telecommunications companies—all have benefited from these two factors.

The best scorecard, though, is the continuing judgment of the marketplace. What is the verdict? Which companies are in favor? Out of favor? Waning or waxing? The answers can be found, or at least surmised,



THE BUSINESS



WEEK TOP 1000

through a perusal of the rankings that begin on page 166. BUSINESS WEEK's annual 1000 ranked list sets forth data on America's most valuable public companies, listed in descending order of their market value as of Mar. 17 of this year.

UNLIKE OTHER RANKINGS based on sales or some mysterious amalgam of statistics, BUSINESS WEEK concentrates on the market's judgment alone. To be sure, "Mr. Market," as Berkshire Hathaway Inc. Chairman Warren E. Buffett calls it, is prone to frequent sulks and bursts of giddiness. "The poor fellow has incurable emotional problems," Buffett remarked last year in Berkshire's annual report. Among thinly capitalized companies, obscurity results in little analyst coverage and a relative paucity of available information, so they're frequently showered with undeserved value or ignored and thereby undervalued.

But among large-capitalization stocks such as those in the BUSINESS WEEK 1000, anomalies are less frequent, and market value remains the single most comprehensive measure of a company's size and the best indication of its prospects. Moreover, market-value data enable you to spot

smaller hot-growth companies that are ignored by revenue rankings. Such companies may be nifty investments—or candidates for short-selling. You be the judge.

Overall, the BUSINESS WEEK 1000 has performed handsomely. Sales for those companies rose 11% in 1988 over 1987, compared with a more modest increase in assets of 8%. But the increase in profits is especially cheery—a jump of just under a third during 1988. That's pretty much in line with the 36% gain in earnings per share for the Standard & Poor's 500-stock index.

Nevertheless, the stock market acumen of the BUSINESS WEEK 1000 companies has been less impressive than the strength of their bottom lines. In a reverse of their subpar performance before the crash, small-cap stocks have outshone their larger brethren. Largely as a result of a stellar first quarter, the Russell 2000 index of small-cap stocks gained 25% in 1988. The Russell 1000 index, which virtually tracks the BUSINESS WEEK roster, gained 17.6%, and the S&P 500's rose 16.5%. So far this year, small-cap stocks have not staged a repeat performance, but they've held their own.

Profits may have been extraordinarily healthy in 1988, but the conventional

wisdom on Wall Street is that earnings peaked in 1988 and will not rise quite so smartly in 1989. The Street has lately been fickle on the subject of recent earnings, failing to reward good news while showering praise on marginal performers that are expected to do well in the future.

The fuel industry is an example of this indifference toward good performance. Energy companies saw their profits zoom 128% in 1988, among the highest gainers in the BUSINESS WEEK 1000 data base. But Wall Street was slow to catch on to the resurgence among these companies, and their market value rose a paltry 7%. Only in recent months have favorable oil-price trends begun to breathe life back into energy stocks.

Miles away from the laggard oil stocks, which have long been among the Street's whipping boys, are telecommunications companies. They seem to be generating a tremendous amount of enthusiasm and much good press concerning the supposed future value of their assets. What they're not generating is much in the way of revenues. As a group, telecommunications took a 21% hit in profits—but rose 22% in market value—and Wall Street's love affair with the growth prospects of cel-

THE TOP 15 IN MARKET VALUE

COMPANY	CURRENT VALUE (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM YEAR AGO
1 IBM	\$66.3	-3%
2 EXXON	59.0	-3
3 GENERAL ELECTRIC	40.5	2
4 AT&T	34.4	11
5 PHILLIP MORRIS	27.0	21
6 GENERAL MOTORS	25.6	14
7 MERCK	25.6	22
8 FORD MOTOR	24.5	11
9 DU PONT	24.3	15
10 AMOCO	20.8	7
11 MOBIL	20.4	9
12 RJR NABISCO	19.3	49
13 BELL SOUTH	18.9	-2
14 CHEVRON	18.6	15
15 WAL-MART	18.6	11

THE TOP 15 IN SALES

COMPANY	1988 SALES (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM 1987
1 GENERAL MOTORS	\$120.4	7%
2 FORD MOTOR	92.4	16
3 EXXON	80.2	3
4 IBM	59.7	8
5 MOBIL	54.9	7
6 SEARS, ROEBUCK	50.3	9
7 GENERAL ELECTRIC	49.4	4
8 CHRYSLER	35.5	21
9 AT&T	35.2	4
10 TEXACO	35.1	-1
11 DU PONT	32.9	8
12 CITICORP	32.0	15
13 PHILIP MORRIS	31.7	13
14 CHEVRON	28.9	-1
15 K MART	27.7	7

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.



ENERGY PROFITS ZOOMED

128% — BUT MARKETS

WERE SLOW TO REFLECT

THE REBOUND

lular-communications companies is one of the main reasons. This is borne out by these companies' dominance of the list of Little Giants—companies on the BUSINESS WEEK 1000 list with sales of less than \$100 million (page 23). Cellular companies are also prominent among companies that have risen the most in rank. Cellular Communications Inc., for example, rose 343 places, to No. 469, while Metro Mobile CTS Inc. gained 176, to a lofty No. 379.

Among the behemoths at the very top of the rankings there was little change. As in 1988, the largest companies are IBM, Exxon, General Electric, and American Telephone & Telegraph, in that order (table). But as one ventures farther down the list, the market's changing judgments become more readily apparent. The most prom-

inent shift among the top echelons is RJR Nabisco Inc., which moved from 27th place in 1988 to 12th in this list. The reason, of course, is the company's acquisition by Kohlberg Kravis Roberts & Co. Last year's celebrated bidding war pushed RJR's stock price sky-high. And the benefits from the merger are not likely to end there. Spinoffs from the RJR empire may well pop up on future BUSINESS WEEK 1000 rosters, and operating units often perform well for shareholders once they are untied from the corporate parent.

IN TERMS OF sheer dollars, the RJR Nabisco buyout was a prime example of how shareholder value can burst forth from a takeover like energy from a split atom. A year ago, RJR Nabisco boasted a market value of \$12.9 billion.

Last fall's original leveraged-buyout proposal by RJR CEO Ross F. Johnson, backed by Shearson Lehman Hutton Inc., would have bought the company for \$17.5 billion. But by the time the dust cleared, the ante had been raised by \$8 billion—raising shareholder value, to be sure, but also raising some serious questions. Was the original management bid an effort to buy the company on the cheap? Or did KKR simply overpay?

Even when questions of valuation are not at issue, LBOs have the lamentable side effect of saddling the target company with significant levels of debt, often turning existing institutional-grade bonds into "junk." A recent case study of deteriorating credit quality as a byproduct of an otherwise routine merger is Ohio Mattress Co. The nation's premier manufacturer of bedding (its big brand is Sealy) is in the midst of a \$980 million buyout—no slouch for a company whose market value a year ago was a mere \$344 million, only barely enough to win a place on the 1988 BUSINESS WEEK 1000. But this year, as a result of the share-price rise brought about by the buyout, Ohio Mattress has been lifted 406 places in the rankings, to No. 578.

Largely as a result of the LBO, Ohio

THE TOP 15 IN PROFITS

COMPANY	1988 PROFITS (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM 1987
1 IBM	\$5.5	4%
2 FORD MOTOR	5.3	15
3 EXXON	5.3	9
4 GENERAL MOTORS	4.6	30
5 GENERAL ELECTRIC	3.4	14
6 DOW CHEMICAL	2.4	94
7 DU PONT	2.2	23
8 PHILIP MORRIS	2.1	15
9 AMOCO	2.1	52
10 MOBIL	2.0	67
11 CHEVRON	1.8	41
12 CITICORP	1.7	NM
13 BELL SOUTH	1.7	0
14 ATLANTIC RICHFIELD	1.6	29
15 EASTMAN KODAK	1.4	19

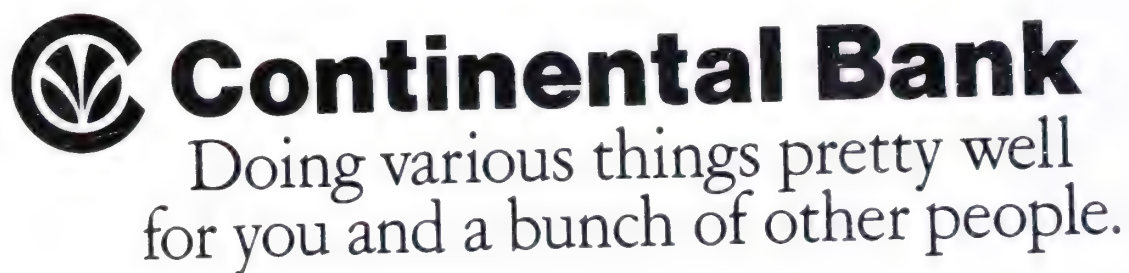
THE TOP 15 IN ASSETS

COMPANY	1988 ASSETS (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM 1987
1 CITICORP	\$207.7	2%
2 GENERAL MOTORS	164.1	1
3 FORD MOTOR	143.4	24
4 AMERICAN EXPRESS	142.7	23
5 FEDERAL NATL. MORTGAGE	112.3	9
6 GENERAL ELECTRIC	110.9	16
7 CHASE MANHATTAN	97.5	-2
8 BANKAMERICA	94.6	2
9 SALOMON	85.3	14
10 SHEARSON LEHMAN HUTTON	84.8	27
11 J. P. MORGAN	83.9	11
12 AETNA	81.5	8
13 SECURITY PACIFIC	77.9	7
14 SEARS, ROEBUCK	77.5	2
15 IBM	73.0	4

* May not include aftertax accounting adjustments NM = Not Meaningful

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Our logo, 1989.

of your suppliers to keep your day-to-day financial machinery running smoothly.

You see, because all our eggs are in the business-banking basket, doing a better job for business is more than a matter of principle for us. It's a matter of necessity.

It's also a matter we invite you to explore in greater detail by calling (312) 828-5799 and talking to a Continental banker.

In the process, you'll make a happy discovery. Our logo may have changed, but everything else...well, everything else has, too.

Mattress shares have risen some 50% since the beginning of the year. But the company's standing in the fixed-income markets deteriorated, quite predictably, because of the expected debt load. After the LBO was announced, both Moody's Investors Service Inc. and Standard & Poor's Corp. promptly announced a review of the company's credit ratings, noting that any future debt issues are likely to be unrated "junk" bonds.

A MORE ORTHODOX way of creating value for shareholders is to raise earnings—or, at least, expectations of improved earnings. In that arena, few companies can match a relatively obscure Chicago telephone-holding company, Telephone & Data Systems. TDS ranked 953 on the 1988 list of the BUSINESS WEEK 1000, but climbed 417 places, the heftiest rise of any company, to No. 536—a higher ranking than that enjoyed by such corporate notables as Control Data Corp. and MGM/UA Communications Co.

DESPITE A DECLINE in profits in 1988, TDS has done remarkably well for its shareholders because of expectations of future growth. The company provides local and long-distance phone service through 80 operating companies in 26 states, and it's supplementing that business by expanding into—guess what?—cellular telephones. TDS is an 80% owner of U.S. Cellular Corp., which went public last May and gained enough shareholder enthusiasm to win a place on the BUSINESS WEEK 1000 (No. 570), albeit as a revenue-sparing Little Giant. TDS shares have almost tripled since the crash and are priced at more than 80 times 1988 earnings.

Also high on the list of ranking upgrades are banks, many of which saw their earnings rise smartly in 1988 over 1987. Take BankAmerica Corp. The



B

**BANK PROFITS PICKED UP
AS INVESTOR MORALE
RECOVERED FROM THE
1987 MARKET CRASH**

San Francisco banking powerhouse, recovering from years of crummy performance, saw its adjusted earnings per share (after providing for Third World loan losses, resulting tax benefits, and large asset sales) climb from 51¢ in

1987 to \$3.64 in 1988 (BW—Apr. 3). As shareholders rejoiced, BankAmerica's rank rose from No. 333 in 1988 to 135 on this year's list. Likewise, Continental Bank, No. 897 in 1988, clawed its way back from hard times, rising to 575. Also climbing with the flood tide of renewed investor confidence were First Maryland Bancorp, which rose from No. 890 to 638, and Florida National Banks of Florida Inc., which trundled up to No. 685 after placing at a lowly 923 last year.

At the opposite end of the spectrum are the Sad Sacks of the 1000: those whose market values plummeted. They include Kroger Co., the big grocery chain that dropped from No. 227 to 580 because of a financial restructuring, and Seagate Technology, a leader in the once-hot computer disk-drive industry, which dropped from No. 474 to 782 as investor enthusiasm waned.

Of course, a depressed market value can attract attention from potential raiders—and the prospect of a buyout at a higher-than-market price. Some 47 companies, including such illustrious takeover targets as Kraft, Stop & Shop, and Macmillan, were on the 1000 list last year, only to vanish from the rankings as the result of mergers. Rising to a place on the BUSINESS WEEK 1000 may be a high honor, but for many companies there is even greater virtue in oblivion.

By Gary Weiss in New York

HOW INDUSTRIES FARED IN MARKET VALUE

THE 10 BIGGEST GAINS

INDUSTRY	BILLIONS OF DOLLARS	PERCENT CHANGE FROM 1988
WESTERN & SOUTHWESTERN BANKS	\$19.1	42 %
TEXTILES	3.2	41
COAL	2.2	38
TELECOMMUNICATIONS SERVICES	65.9	36
TOBACCO	55.6	35
ENTERTAINMENT	24.7	34
BROADCASTING	36.3	32
ALUMINUM	10.4	28
REAL ESTATE	4.3	25
STEEL	7.8	24

THE 10 DEEPEST DROPS

INDUSTRY	BILLIONS OF DOLLARS	PERCENT CHANGE FROM 1988
TIRE & RUBBER	\$4.2	-16 %
SEMICONDUCTORS	17.1	-14
INSTRUMENTS	9.6	-10
ELECTRONICS	19.3	-9
RAILROADS	26.5	-5
INDUSTRIAL DISTRIBUTION	7.9	-5
BUSINESS & COMPUTER SERVICES	9.8	-4
MISCELLANEOUS SERVICES	5.6	-4
PETROLEUM SERVICES	18.0	-4
ELECTRICAL PRODUCTS	22.5	-3

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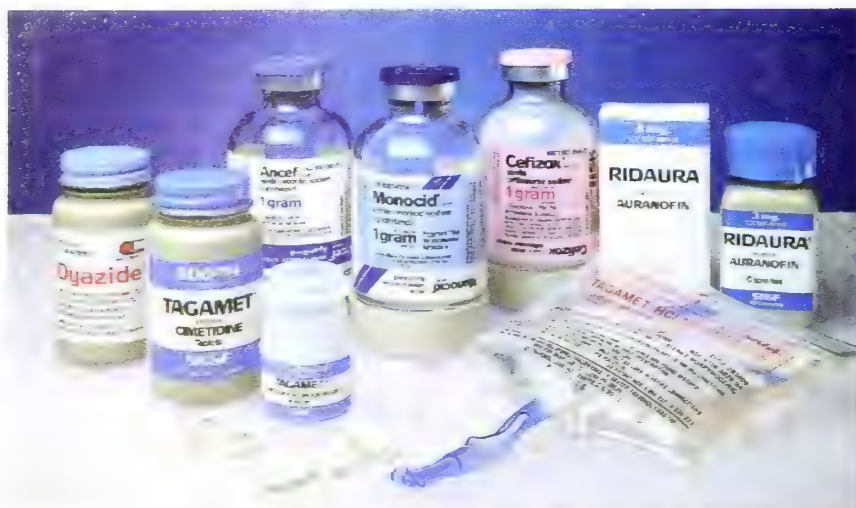
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THE LITTLE GIANTS

PRESS YOUR EAR TO THE DOORS of these companies and you won't hear much rustle of greenbacks in their cash drawers. Nevertheless, investors are paying close attention to this roster of "Little Giants"—whose perceived acumen in generating future revenues has pushed their market valuations into the ranks of the Top 1000, despite sales of less than \$100 million. This year there are 22 of them (page 26) all striving for the day when their revenues will stride into the nine figures.

Dominating this year's roster are cellular telephone companies. That's not surprising, given Wall Street's enthusiasm for this rapidly growing segment of the telecommunications industry. One hot newcomer is Contel Cellular (No. 297 in the Top 1000), which was formed when parent Contel Corp. spun off 10% of its cellular holdings in an \$85 million stock offering in April, 1988. Since the offering, the offspring's stock has jumped from \$17 to some \$38 per share. With partnerships in such lucrative markets as Los Angeles, and expansion underway in rural areas such as Vermont, Contel Cellular ranks as one of the few profitable cellular operators in the country. The company recorded a \$2.6 million profit on \$28.3 million in revenues during the most recent 12-month period.

Other cellular phone companies generally have not fared so well, but they nonetheless boast hefty market capitalizations because of expectations for burgeoning revenues—someday. Metro Mobile CTS (No. 379), a major cellular operator in the Southwest, returns for

its third straight year on the Little Giants list despite widening losses. Likewise, North Carolina-based Vanguard Cellular Systems (No. 761) is another cellular play that has managed to maintain a hefty market valuation despite losses caused by heavy capital expenditures. During the company's

markets and expanding in 11 other areas, the company tripled its roster of clients last year.

Also looming large in the cellular business is a newcomer to the Top 1000, Associated Communications Corp. (No. 947). Founded 10 years ago, this Pittsburgh-based company was a run-of-the-mill radio broadcaster until 1985, when Chairman and CEO Jack N. Berkman decided to sell off all but two stations and buy into the budding cellular business. Associated owns interests in five cellular companies in New York, Pittsburgh, and the San Francisco-San Jose area. Sales from cellular operations grew to \$12.5 million last year, 78% of total sales vs. \$315,500 in 1986. But earnings won't begin to flow until the cellular phone network begins to take on subscribers. One plus is the company's 5% interest in Tele-Communications Inc., one of the nation's largest cable systems, purchased for \$7 million in 1979 and currently worth \$229 million.

Drug companies also continue to be a major presence among the Little Giants. Alza Corp. (No. 599), which specializes in drug delivery systems, returns for a fourth year. The company has about 30 products in various stages of development, aimed at such commonplace afflictions as angina, hypertension, asthma, and pain. The prospects for these products have analysts projecting a 50% annual growth rate through 1990. In 1988 earnings grew more than 20%, to \$17 million on revenues of \$84.2 million. Amgen (No. 633) is back for a third time. The company lately has



CELLULAR TELEPHONES BUMPED THE DRUG BOUTIQUES AS THE HOTTEST GROWTH GROUP

first year in the public domain, revenues rose 110%, to \$22.9 million, but losses more than doubled, to \$26.6 million. U.S. Cellular (No. 570) also lost money in 1988, and it is expected to lose again this year. But its market valuation has risen to lofty levels by dint of the company's aggressive growth. By adding service in 17 new



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aroused investor enthusiasm for its development of EPO, an anemia-fighting drug soon to hit the market. Analysts expect this drug will eventually rake in sales of as much as \$2 billion.

Cetus (No. 956) is likewise riding high. The biotech company has filed for approval of Interleukin-2, an anti-cancer drug that analysts expect will draw revenues in the \$200 million range in the 1990s, and it is also engaged in other advanced research that has drawn Wall Street's attention. It is one of the few biotechnology companies that is believed to stand a good chance of making the transition to a full-line drug company.

Other high-tech outfits benefiting from lofty growth expectations are Adobe Systems (No. 865) and Forest Laboratories (No. 795). Forest is a major developer of sustained-release drugs including its patented Synchron system that produces tablets providing a continuous release of medication into the bloodstream. Adobe, which has pioneered software for laser printers, recently created Display PostScript, a language for computer screens that has excited some investors. More down-to-earth is TCBY Inc. (No. 804), the frozen yogurt franchise operation. TCBY's franchising system has undergone explosive growth, zooming to 1,240 stores from fewer than 100 five years ago.

APART FROM the cellular and high-tech outfits, the other major group of Little Giants flows from the real estate business. One notable example is Chicago Milwaukee Corp. (No. 988). Its relatively high market cap reflects the company's substantial cash, real estate holdings, and tax-loss benefits. Chicago Milwaukee sold off its rail assets in the late 1970s and today is a money management/real estate development firm. Later this year, Chicago Milwaukee expects to spin off its real estate holdings to shareholders, possibly in the form of a limited partnership.

Real estate investment trusts are also well-represented. Returning to the list for a third straight year is First Union Real Estate (No. 979). But that's no great honor, for the company has seen its revenues remain essentially flat for three straight years. Right above it on the Little Giants list is Weingarten Realty (No. 963), one of the few real estate companies to survive the Houston economic debacle. The company prospered by playing it safe during the oil boom. Although critics dismissed it as too conservative, Weingarten stuck to its simple formu-

la: strip shopping centers of 50,000 to 300,000 square feet with anchor tenants such as large supermarkets. The anchors have enough consistent drawing power to survive the downturn. Revenues in 1988 increased 5.9%, to \$64.76 million. Another Lone Star State real estate outfit to make the list is San Juan Basin Royalty Trust (No. 897). A holding company administered by Texas American Bank, the company has generated investor interest in its oil and gas leaseholds in New Mexico's San Juan Basin.

TCA Cable TV (No. 880) has had substantial success through its strategy of penetrating only mid-size cities and rural markets. The company doesn't operate in larger cities, on the theory that the highest operating efficiencies can be had in rural areas. Chairman Robert M. Rogers is the majority shareholder, and the company is viewed in some quarters as a possible takeover target. But in fact no takeover attempts have materialized.

By Gary Weiss in New York, with bureau reports

THE LITTLE GIANTS

COMPANIES WITH HIGH MARKET VALUE & 1988 SALES BELOW \$100 MILLION

COMPANY	MILLIONS OF DOLLARS		INDUSTRY
	MARKET VALUE	SALES	
CONTEL CELLULAR	1888	36	Telecommunications
METRO MOBILE CTS	1470	68	Telecommunications
CELLULAR COMMUNICATIONS	1109	52	Telecommunications
U. S. CELLULAR	836	16	Telecommunications
ALZA	773	85	Drugs & research
AMGEN	706	77	Drugs & research
VANGUARD CELLULAR SYSTEMS	557	23	Telecommunications
TEJON RANCH	530	15	Food processing
FOREST LABORATORIES	518	93	Drugs & research
TCBY ENTERPRISES	509	98	Eating places
ADOBE SYSTEMS	437	84	Computer software
NEW PLAN REALTY TRUST	436	39	Real estate
TCA CABLE TV	423	72	Broadcasting
SAN JUAN BASIN ROYALTY TRUST	408	16	Oil & gas
MAGMA POWER	377	27	Utilities
ASSOCIATED COMMUNICATIONS	368	17	Telecommunications
CETUS	361	32	Drugs & research
WEINGARTEN REALTY INVESTORS	357	65	Real estate
FIRST UNION REAL ESTATE	347	74	Real estate
SYMBOL TECHNOLOGIES	346	93	Computers
CHICAGO MILWAUKEE	341	42	Railroads
FOREST CITY ENTERPRISES	334	90	Building materials

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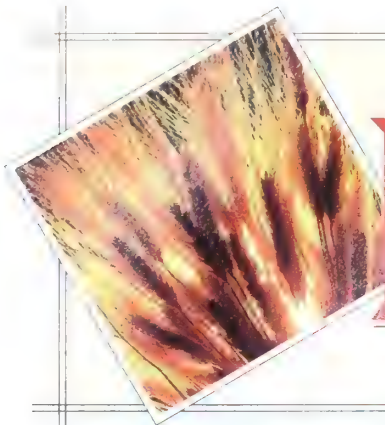
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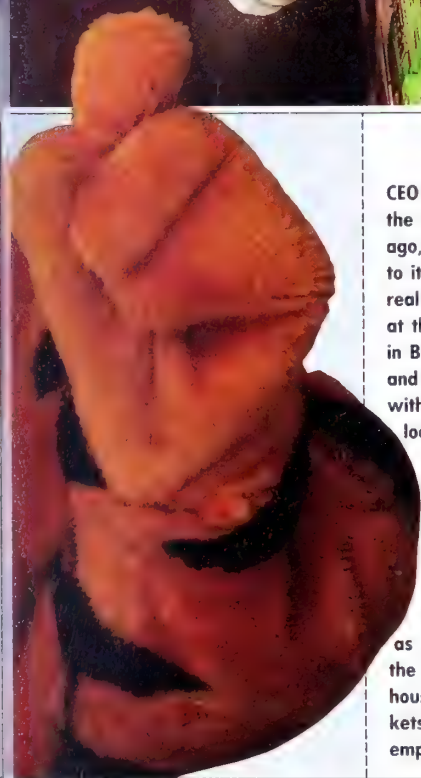
PHOTOGRAPHS BY SETH RESNICK

TEXT BY WENDY ZELLNER

ASK THE FOLKS AT KELLOGG CO. HOW THEY'RE doing these days, and the answer is a resounding G-R-R-R-E-A-T! And shareholders might echo Tony the Tiger's famous sentiment. The cereal maker's profits have grown an average 18% annually for the past four years—without risky acquisitions—and return on equity stands at a fat 34%. Those results impressed Wall Street enough to boost Kellogg 6 spots to No. 56 in the BUSINESS WEEK Top 1000 ranking. That represents an 11% gain in market value to over \$7 billion. What's all the roaring about? Snappy marketing, constant product innovation, and heavy investment in some of the most efficient factories in the food business. But the driving force behind Kellogg's 15% sales growth last year—to \$4.3 billion—is the booming interest in health and convenience that's spreading around the globe. Indeed, Kellogg's cereal sales are growing nearly twice as fast overseas as in the U.S. That's not to say Kellogg has run out of room at home. It already dominates the expanding U.S. cereal business, with 41% of the market. The long-range goal: a towering 50% share. The company is still searching for an acquisition that would accelerate growth, says Chairman William E. LaMothe, but few compatible businesses offer Kellogg's rate of return. The cereal maker has gobbled up Mrs. Smith's frozen pies and Whitney's yogurt, but the noncereal lines are less than 20% of Kellogg's sales. "Ready-to-eat cereal basically is our thing," LaMothe says modestly. "We're dedicated to doing it better than anyone else in the world." He drives that message home every Monday morning, when he and top executives taste-test Kellogg's cereals from around the world. His own breakfast choice? LaMothe doesn't play favorites. He mixes cereals to create new concoctions. Here—in pictures—is how Kellogg has stayed on top.

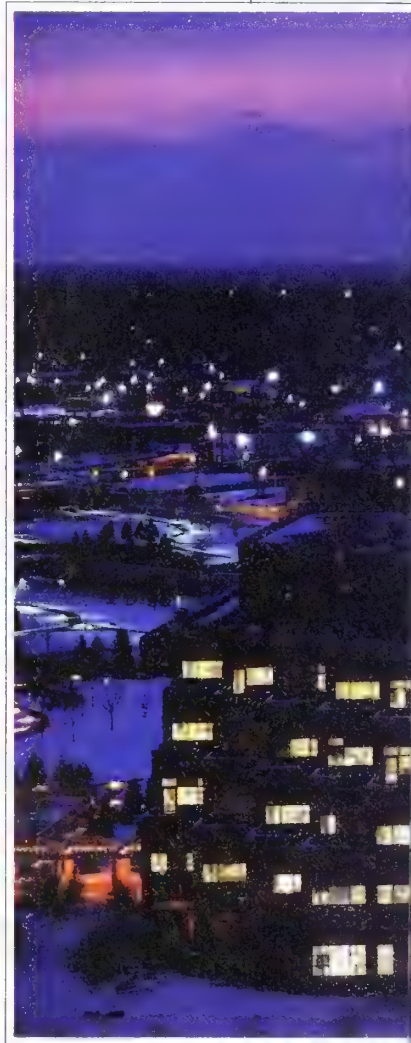


CEO LaMothe, who took the top job a decade ago, keeps Kellogg close to its roots: The first cereal flakes were served at the Kellogg sanitarium in Battle Creek, Mich., and LaMothe (at left with Tony the Tiger) still looks to breakfast cereals for growth. U. S. per capita consumption grew 10% since 1984, to 10 pounds. Nimble promotion of such health-fad products as oat bran have made the company a powerhouse in the supermarkets. Above, a Kellogg employee rotates stock

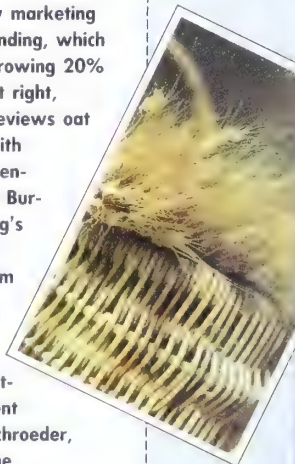


To defend its share of the expanding cereal market, Kellogg spends heavily to build and modernize processing plants. This one in Lancaster, Pa., churns out 1 million boxes of cereal every day (right).

Capital spending this year will hit nearly \$600 million, up 144% from the level of four years ago, and LaMothe intends to boost cereal capacity 3% to 5% annually through 1993. Below, he inspects a line in Battle Creek's Building 100, the world's most sophisticated cereal production facility. It's part of a complex that already makes more breakfast food than anyplace else in the world. When expansion is complete next year, the complex will produce about 500 million pounds of cereal annually. These big investments pay off handsomely in productivity gains that typically exceed 5% a year



From headquarters in Battle Creek (above), Kellogg runs a marketing juggernaut that launches nearly 40 new cereals a year worldwide. The quintessential packaged-goods company, Kellogg is driven by marketing and ad spending, which has been growing 20% annually. At right, the brass reviews oat bran ads with James M. Jenness of Leo Burnett, Kellogg's primary ad agency. From left: Executive Vice-President Gary E. Costley, President Horst W. Schroeder, and LaMothe



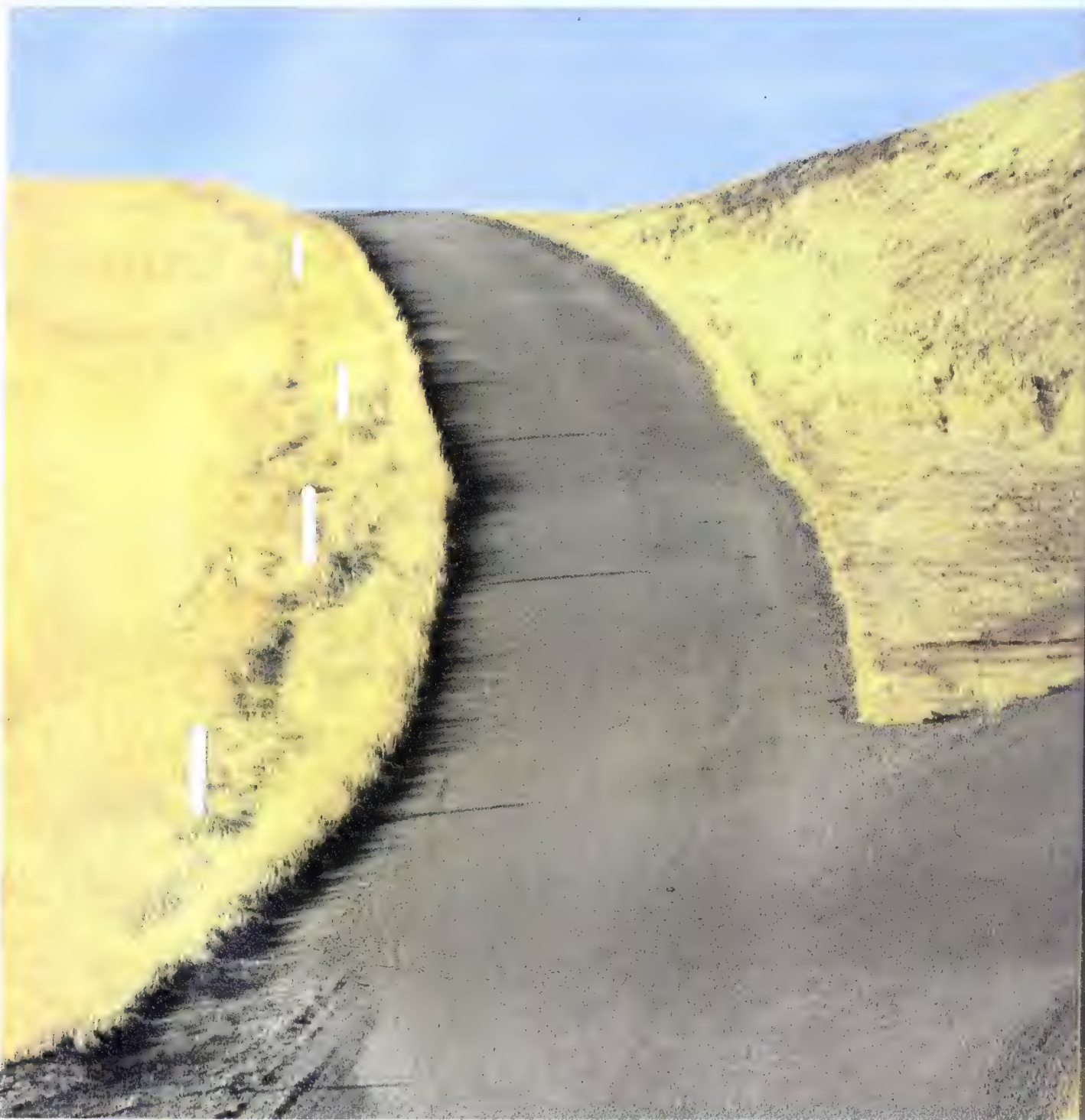


Kellogg is looking outside the U. S. for fast growth. Entrenched in Europe and Japan, where Genmai brown-rice flakes and corn flakes are best-sellers (above), the company looks for half of its sales abroad. To stay tuned to consumers, Kellogg tests and tests. Below: tasting cereals in Battle Creek's "sensory room." Bottom: a nutritionist listens for the crackle that signals well-baked muffins



PHOTOGRAPH BY (TOP RIGHT) HIROSHI FUJO

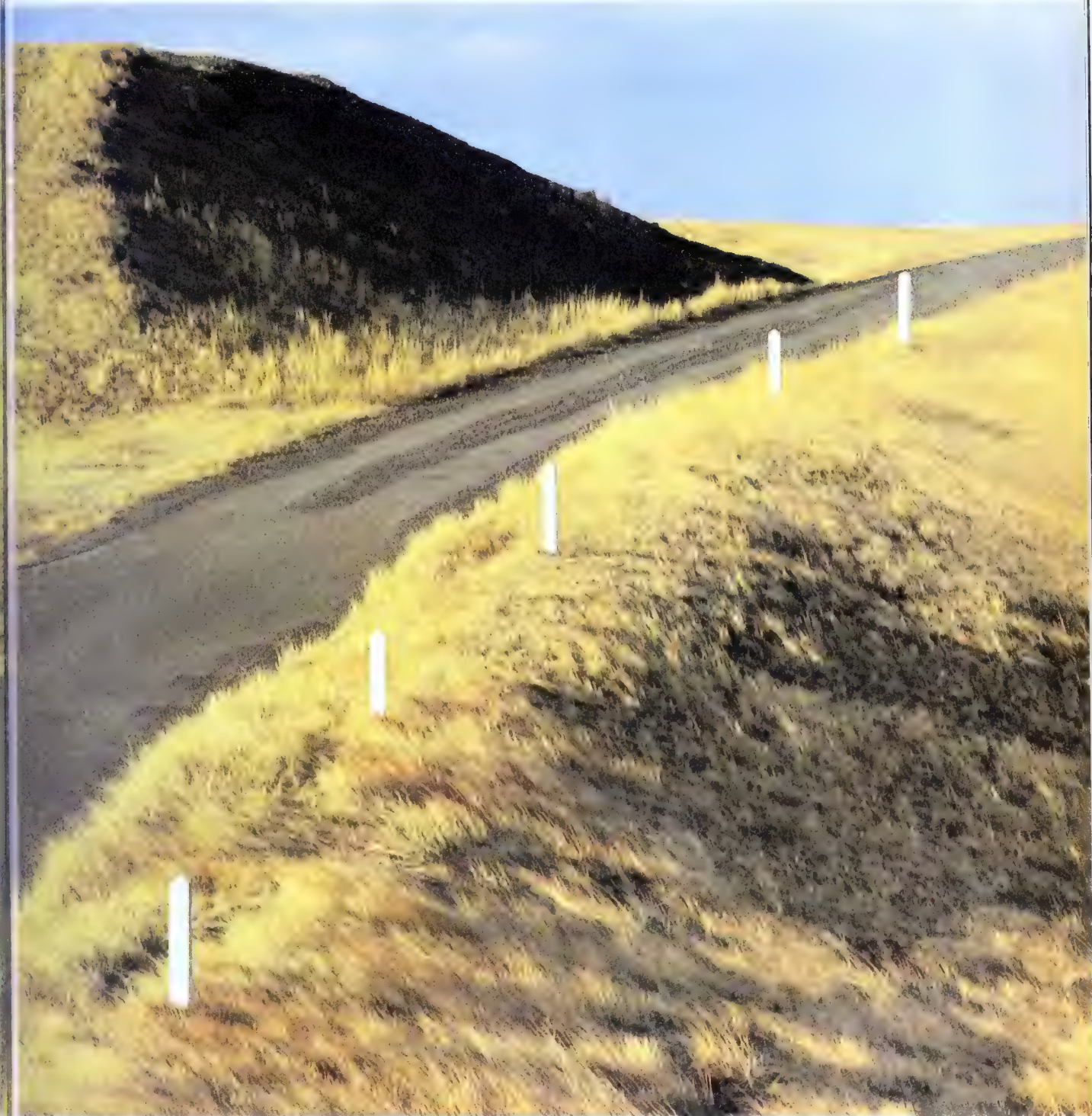
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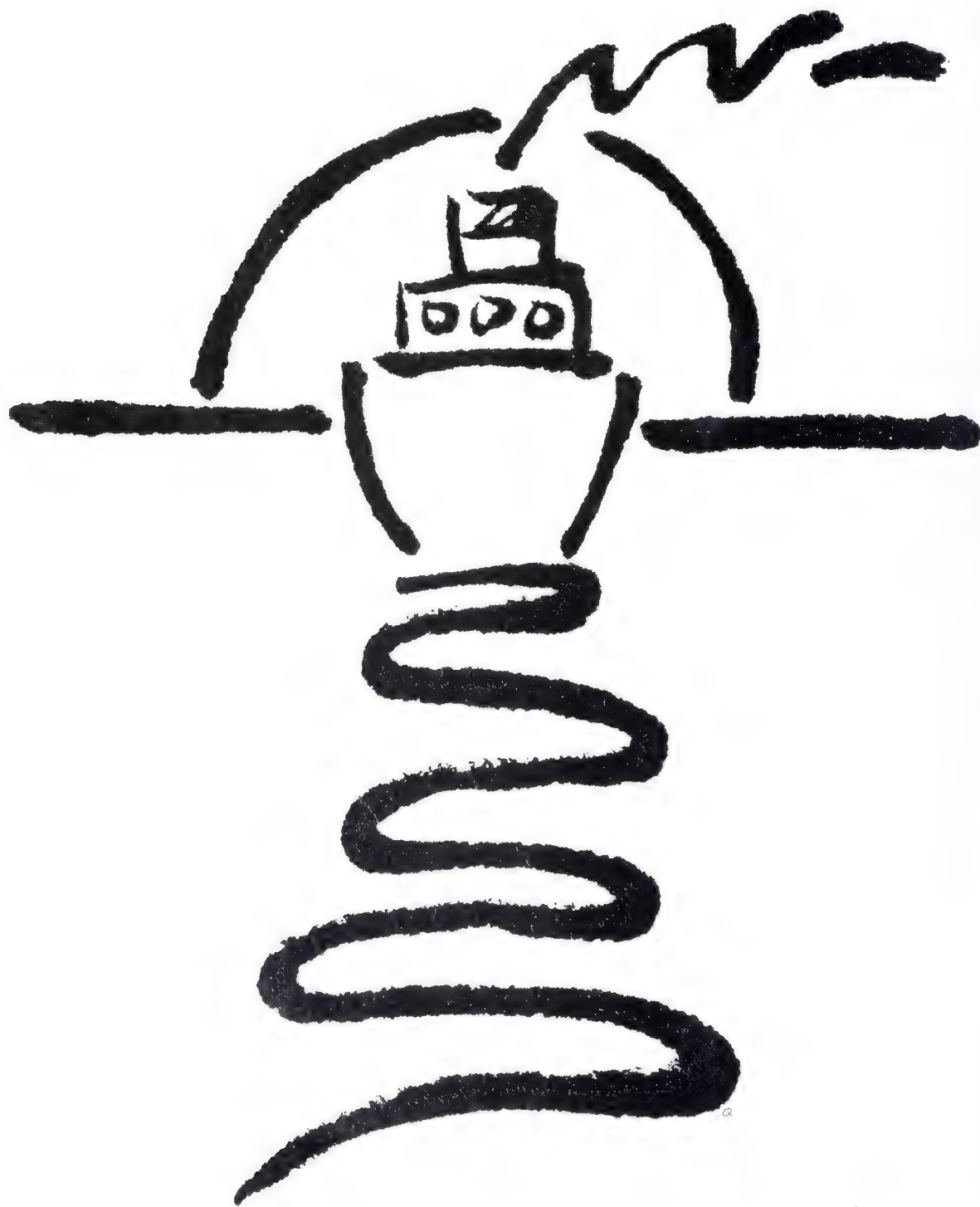


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HYPERDRIVE



200 DEALS

IN MERGERS AND ACQUISITIONS, 1988 was definitely a big deal. In fact, it was the year of the big deal.

By Dec. 31 takeover specialists had closed 42 transactions each worth \$1 billion or more—a record by far. Plenty of money chased smaller prey, too—spurring competition and pushing up prices. Buyers ended up paying big premiums—an average of 50% over the pre-bid market price vs. about 35% in 1987, according to *Mergers & Acquisitions* magazine. The average price of a deal climbed 39%, to \$130 million.

So even though the number of completed deals dropped for the second consecutive year, to 3,487 in 1988, it was a banner year for takeovers. Aggregate value grew by 25%—to a record \$222.6 billion. And that doesn't include the precedent-shattering \$25 billion buyout of RJR Nabisco, the \$5.8 billion takeover of Pillsbury, or nine other billion-dollar deals started in 1988 but uncompleted by yearend (page 66).

Peruse the list of 1988's Top 200 deals and it's easy to see what's driving the hyperactive M&A market. Corporate acquirers were making strategic buys in areas close to their core businesses. Philip Morris Co., for example, bought Kraft to complement its earlier purchase of General Foods Corp. Similarly, American Stores Co. picked up Lucky Stores.

Deconglomeration—unwinding past diversifications—prompted a lot of ac-

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F

FOREIGN BUYERS WERE HERE IN FORCE, AS THE JAPANESE GRABBED THIRD PLACE

ion. Divestitures accounted for nearly a third of M&A activity last year. Among the notable ones: UAL Corp. sold its computerized reservation system and its hotels and became just an airline, while IC Industries, now known as Whitman Corp., decided to concentrate on consumer goods and dumped its Pneumo Abex industrial and aerospace unit. UAL's Westin Hotel and IC's Pneumo both went private in buyouts.

Which brings us to the ubiquitous leveraged buyout. It was as popular as ever in 1988: LBOs represented about 20% of the dollar volume of all deals—about the same as the 1987 share. The ever present Kohlberg Kravis Roberts was involved in nine deals on the Top 200 list—plus RJR Nabisco.

While not LBOs themselves, quite a few deals were stimulated by the need

of buyout specialists to cash in assets in order to pay off debt from a successful takeover campaign. Campeau's sale of its Federated and Allied store divisions, for example, accounted for four deals on the 200 list, while Paul Bilzerian's breakup of Singer after his capture of the defense manufacturer accounted for four more.

Whatever the rationale, 1988's M&A activity was broad-based. Takeovers have long since spread beyond old-line industries, where the wave began. They now blanket the service sector and high-technology businesses, too. In fact, the three industries with the greatest number of deals were service-based: banking, retailing, and wholesaling/distribution. Analyzed by dollar value, the top three industries were retailing, food, and chemicals.

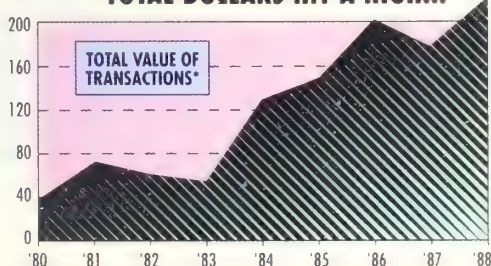
You don't have to go far down the list to see evidence of another trend: the prominence of overseas buyers, who made four of the top 10 deals. All told, foreigners accounted for 12% of the U.S. M&A deals in 1988 and 27% of the dollar value, vs. 9% of all deals and 25% of the dollar value in 1987. Britain and Canada remained the most active foreigners. Japan also came on strong—completing 45 deals worth \$11.9 billion and moving into No. 3 position. West Germany and France rank next, though they're way behind.

RIGHT NOW, all systems are go for another big year. Early on, the RJR Nabisco buyout put a crimp in M&A activity. The financial markets took time to digest the huge deal, and the circus-like atmosphere that surrounded RJR's auction inhibited hostile deals, big-ticket deals, and highly leveraged deals. Now the markets are ready for more, and Congress seems unable to craft anything to curb takeovers that wouldn't have more negative than positive effects. Barring a deep recession or regulation coming out of left field, the buying spree promises to be buoyant throughout 1989. It may not be a record year, but it'll be a good one.

By Judith H. Dobrzynski in New York

THE MERGER RECORD IN 1988

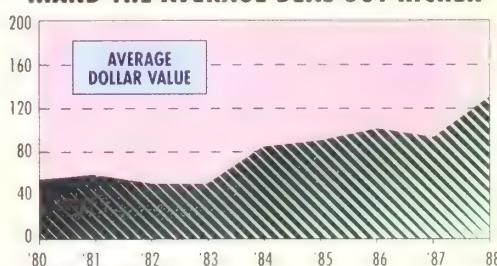
TOTAL DOLLARS HIT A HIGH...



▲ BILLIONS OF DOLLARS

*INCLUDES ONLY TRANSACTIONS IN WHICH PRICE WAS DISCLOSED; ADJUSTED FOR CHANGES IN PRICE OF NONRESIDENTIAL FIXED INVESTMENT, 1982 DOLLARS, FOURTH QUARTER EACH YEAR

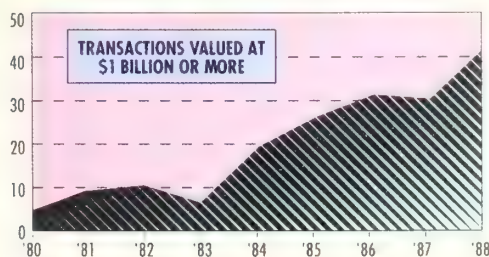
...AND THE AVERAGE DEAL GOT RICHER



▲ MILLIONS OF DOLLARS*

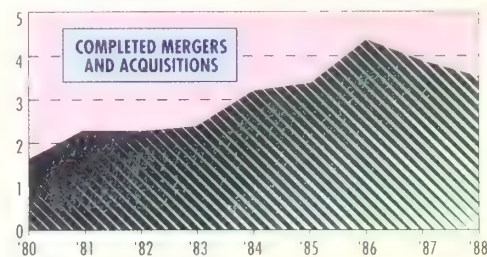
*ADJUSTED FOR CHANGES IN PRICE OF NON RESIDENTIAL FIXED INVESTMENT, 1982 DOLLARS, FOURTH QUARTER EACH YEAR

MORE BILLION-DOLLAR DEALS...



▲ COMPLETED TRANSACTIONS

...THOUGH TOTAL DEALS FELL



▲ THOUSANDS

DATA: M&A DATA BASE MERGERS & ACQUISITIONS MAGAZINE, BW

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THE TOP 200 DEALS

A GUIDE TO THE BIGGEST COMPANIES, SUBSIDIARIES, AND DIVISIONS THAT WERE MERGED, BOUGHT OUT, RESTRUCTURED, PRIVATIZED, ESOPED, OR SPUN OFF DURING 1988. THE DEALS ARE RANKED BY ANNOUNCED TRANSACTION PRICE, INCLUDING DEBT ASSUMPTION WHERE STIPULATED. INCLUSION IN THIS LIST IS DETERMINED BY DATE TRANSACTION WAS COMPLETED. A SPECIAL LIST OF THE LARGEST TRANSACTIONS THAT WERE LAUNCHED IN 1988 BUT NOT COMPLETED UNTIL THE FIRST QUARTER OF 1989, OR THAT ARE STILL PENDING, APPEARS ON PAGE 66

EDITED BY ALISON LESTER

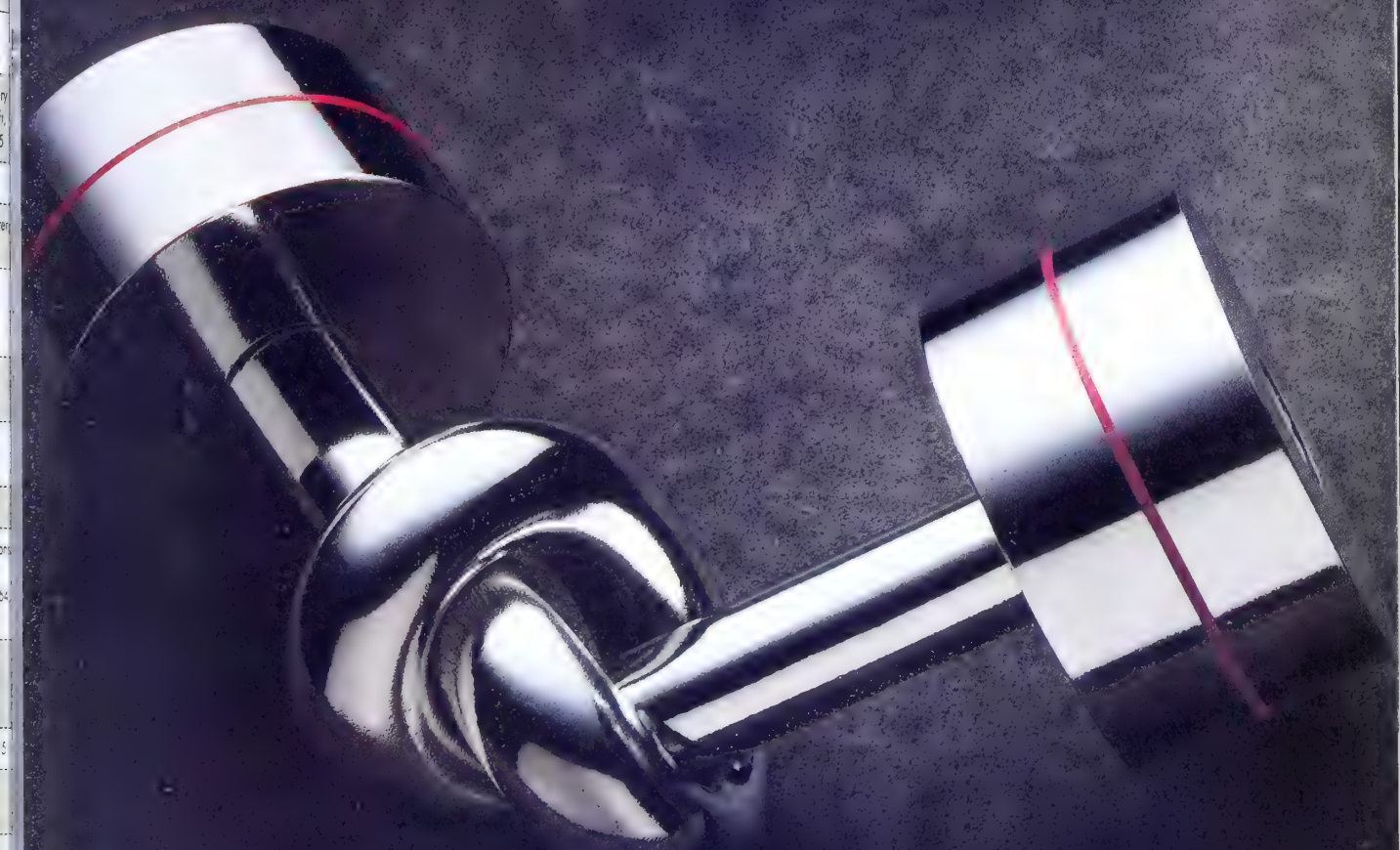
SELLER	BUYER	PRICE \$ MIL	COMMENTS
1 KRAFT	PHILIP MORRIS	12644	The tobacco giant acquired the nation's biggest independent food company to form the world's largest consumer products company; for an earlier Kraft sale, see No. 17
2 FEDERATED DEPT. STORES	CAMPEAU	6506	After a bitter battle, the Canadian real estate developer captured his second big U. S. retailer. He's been busy restructuring both Federated and Allied to pay down the huge debt; for those sales, see Nos. 25, 38, 67, and 138
3 FARMERS GROUP	B. A. T. INDUSTRIES	5169	The British tobacco, retailing, and financial services company bought a Los Angeles-based insurance company
4 STERLING DRUG	EASTMAN KODAK	5093	The photo and chemicals concern acquired the producer of Bayer Aspirin and other pharmaceutical and household products
5 DOME PETROLEUM	AMOCO	3766	The big oil company bought a financially troubled oil-and-gas producer
6 FORT HOWARD	PRIVATE GROUP	3589	A paper company was taken private by a group led by management and Morgan Stanley; for a smaller Morgan Stanley deal, see No. 89
7 TRIANGLE PUBLICATIONS	NEWS CORP.	3000	Rupert Murdoch's media empire bought the publisher of <i>TV Guide</i> , <i>Seventeen</i> , and the <i>Daily Racing Form</i>
8 FIRESTONE	BRIDGESTONE	2661	In an effort to raise its share of the U. S. market, a Japanese tiremaker bought a big name in American tires
9 MACMILLAN	MAXWELL COMMUNICATION	2642	Robert Maxwell's British publishing power captured a major U. S. publisher despite an elaborate defense. For another Maxwell buy, see No. 65
10 TENNECO	CHEVRON	2600	Busily cutting debt, the pipeliner sold its energy reserves in the Gulf of Mexico to the San Francisco-based energy company; for other Tenneco sales see Nos. 51, 70, 79, and 86
11 LUCKY STORES	AMERICAN STORES	2509	After a bitter takeover fight, one big Western grocery chain bought another to create the nation's largest supermarket; for the sale of a Lucky division, see No. 150
12 JIM WALTER	PRIVATE GROUP	2436	The big homebuilder was taken private by a group led by Kohlberg Kravis Roberts; for other KKR deals, see Nos. 17, 24, 33, 35, 64, 73, 111, and 125
13 AMERICAN STANDARD	PRIVATE GROUP	2431	A leading plumbing manufacturer ended a bitter battle with Black & Decker by going private with the help of Kelso & Co., an investment bank that specializes in employee stock ownership; for another Kelso deal, see No. 145
14 BORG-WARNER	GENERAL ELECTRIC	2310	Coming to the end of its asset liquidation, the chemical and industrial company that went private in 1987 sold its chemical and plastic businesses; for other GE transactions, see Nos. 42, 95, and 165
15 GRAND METROPOLITAN	SEIBU/SAISON GROUP	2150	The U. S. operating company of a British hotel and consumer conglomerate sold Intercontinental hotels to a Japanese hotel and retailing group



THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
16 CBS	SONY	2000	Larry Tisch's entertainment company sold CBS Records, the world's biggest record company, to the Japanese consumer-electronics giant
17 KRAFT	PRIVATE GROUP	1800	Vainly dodging takeover, the packaged goods marketer sold its Duracell batter business to a group led by Kohlberg Kravis. For Philip Morris' takeover of Kraft see No. 1; for more KKR deals, see Nos. 12, 24, 33, 35, 64, 73, 111, and 125
18 FIRST BOSTON	CREDIT SUISSE	1677	An investment banker merged with the big Swiss bank that controlled it
19 KIDDE	HANSON	1605	The British conglomerate bought a consumer goods and equipment manufacturer for a subsequent sale of assets, see No. 191
20 IMS INTERNATIONAL	DUN & BRADSTREET	1589	The publishing and business information concern acquired a supplier of market research and database publishing services to pharmaceutical companies; for another D&B deal, see No. 65
21 KOPPERS	BEAZER	1553	The big British building company wrested control of the Pittsburgh construction-materials and chemicals producer after a tough fight
22 PRIMERICA	COMMERCIAL CREDIT	1507	Sandy Weill's financial services company bought Jerry Tsai's financial conglomerate; for sales of pieces of Primerica, see No. 71 and No. 112
23 MOBIL	PRIVATE GROUP	1500	The oil company sold Montgomery Ward to management and GE Capital
24 SCI HOLDINGS	PRIVATE GROUP	1500	KKR unloaded the cable operations of its 1985 buyout of Storer Communication to a group of cable operators that included American TV & Communications, Taft Cable, and Comcast; for other KKR operations, see Nos. 12, 17, 33, 35, 64, 73, 111, and 125
25 CAMPEAU	MAY DEPARTMENT STORES	1500	The Canadian real estate developer peddled Federated's Filene's department stores (Boston) and Foley's stores (Houston) to the St. Louis retailer; for his Federated buy, see No. 2; for more divestitures, see Nos. 38, 67, and 138
26 STALEY CONTINENTAL	TATE & LYLE	1452	A British sugar refiner bought a U. S. ditto; for other deals, see Nos. 74 and 15
27 IRVING BANK	BANK OF NEW YORK	1441	After more than a year of resistance, one big New York bank sold out to another. The result: the nation's 12th-largest banking organization
28 UAL	PRIVATE GROUP	1350	What once was Allegis divested non-airline assets by selling Westin Hotels to a buyout group led by Robert Bass and Japan's Aoki Corp.; for another sale, see No. 99; for other Bass deals, see Nos. 73, 98, and 129
29 SEVEN-UP	DR PEPPER	1300	Hicks & Haas, a Texas-based LBO firm, merged two soft-drink makers it controlled into the third largest pop producer
30 G. HEILEMAN BREWING	BOND CORP.	1296	America's fifth largest brewer (Iron City, Lone Star, Rainier, Schmidt) sold out to Alan Bond, the Australian investor and conglomerateur
31 CAIN CHEMICAL	OCCIDENTAL PETROLEUM	1250	The closely held operator of petrochemical plants and pipeline systems, plucked from Conoco in 1987 in an LBO, was purchased by Armand Hammer's oil and beef company; for another Oxy deal, see No. 177
32 IC INDUSTRIES	PRIVATE GROUP	1230	An LBO of Pneumo Abex aerospace operations from a conglomerate renamed Whitman Corp. Asset sales by the group, led by Wasserstein, Perella, are slow. For another Wasserstein, Perella deal, see No. 160
33 STOP & SHOP	PRIVATE GROUP	1228	Fleeing a hostile raid by Washington's Haft family, the Boston-based food and apparel retailer succumbed to a buyout led by Kohlberg Kravis Roberts; for other KKR deals, see Nos. 12, 17, 24, 35, 64, 73, 111, and 125
34 J. P. STEVENS	WEST POINT-PEPPERELL	1216	The textile concern acquired another textile giant, then sold about half of Stevens to its unsuccessful bidding rival, Odyssey Partners, a New York investment group. West Point itself has since been gobbled up
35 BEATRICE	SEAGRAM	1200	Kohlberg Kravis unloaded another piece of its huge food acquisition by selling the Tropicana juice unit to the nation's biggest distiller. For other KKR deals, see Nos. 12, 17, 24, 33, 64, 73, 111, and 125

M U S C L E



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THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
36 AMERICAN BRANDS	PRIVATE GROUP	1200	In a complicated transaction, the consumer conglomerate sold most of E-II Holdings, the Beatrice stub it acquired earlier in the year, to the family of investor Meshulam Riklis; for the E-II buy, see No. 39
37 HENLEY GROUP	ITEL	1194	The conglomerate sold its leasing operations and its stakes in Santa Fe Southern Pacific and American President Cos. to a transportation-leasing company
38 CAMPEAU	R. H. MACY	1100	Another divestiture of Federated units. The West Coast's I. Magnin and Bullock's went to Campeau's rival bidder for Federated; for the victor's acquisition, see No. 2; for other divestitures see Nos. 25, 67, and 138
39 E-II HOLDINGS	AMERICAN BRANDS	1054	When the dust from this battle cleared, the food and tobacco company owned the consumer conglomerate built from the big Beatrice LBO; for another Beatrice transaction, see No. 35. For the subsequent sell-off of most of E-II, see No. 36
40 GOULD	HIPPON MINING	1047	A computer and electronics company was bought by a Japanese metals, refining, and petrochemicals concern; for the sale of a Gould unit, see No. 166
41 SANTA FE SOUTHERN PACIFIC	ANSCHUTZ	1020	The giant railroad company sold its Southern Pacific operations to the Denver investor's Rio Grande Industries subsidiary, which operates the Rio Grande & Western RR; for another Santa Fe divestiture, see No. 105
42 MOBIL	GENERAL ELECTRIC	1000	The oil company sold the credit-card operation of its Montgomery Ward unit to GE's financial arm. For the sale of Montgomery Ward, see No. 23; for other GE deals, see Nos. 14, 95, and 165; for a Mobil buy, see No. 86
43 NORSTAR BANCORP	FLEET FINANCIAL GROUP	974	One bank-holding company (Rhode Island) bought another (New York)
44 E. F. HUTTON	SHEARSON LEHMAN	962	The Wall St. brokerage and investment-banking powerhouse controlled by American Express bought a troubled rival
45 COLGATE-PALMOLIVE	PRIVATE GROUP	960	The soap giant sold Kendall surgical goods to a group led by Clayton & Dubilier
46 SINGER	PRIVATE GROUP	946	A defense conglomerate was captured by raider Paul Bilzerian, who has been selling off the pieces. For the sale of the pieces, see Nos. 90, 137, 147, and 168
47 AFG INDUSTRIES	PRIVATE GROUP	941	Despite a last-minute counter-offer by Forstmann, Little, the California-based glassmaker was taken private by a group led by senior management. For Forstmann successes, see Nos. 61, 96, and 116
48 TELEX	MEMOREX INTERNATIONAL	911	Dodging raider Asher Edelman, a computer-equipment maker sold out to an Anglo-Dutch competitor to form the biggest independent producer of IBM-compatible peripherals. For other Edelman adventures, see Nos. 49 and 189
49 PAYLESS CASHWAYS	PRIVATE GROUP	909	After another feint by Edelman, a building-materials retailer was LBOed by management. For more on Edelman, see Nos. 48 and 189
50 AMFAC	JMB REALTY	904	The big real-estate developer and syndicator bought a Hawaiian conglomerate for its island property. For an Amfac divestiture, see No. 172
51 TENNECO	AMOCO	900	The gas pipeliner sold its Rocky Mountain division to a big energy company; for other Tenneco sales, see Nos. 10, 70, 79, and 86
52 PACE INDUSTRIES	PALOMA INDUSTRIES	850	A Japanese maker of water heaters bought a U. S. ditto (the brand is Rheem)
53 FIDELCOR	FIRST FIDELITY BANCORP.	846	A New Jersey banking group took over a Pennsylvania banking group—and has since run into serious earnings and management trouble
54 TRIANGLE INDUSTRIES	CJT INDUSTRIES	826	Nelson Pelz's can company was merged into another of his companies, a maker of coin sorters and other products. The name remained Triangle. Pelz has since struck a celebrated deal to sell Triangle to France's Pechiney
55 KAISERTECH	MAXXAM	825	An aluminum producer was bought by Houston raider Charles Hurwitz's conglomerate; for an earlier KaiserTech divestiture, see No. 183
56 FIRST JERSEY NATIONAL	NATIONAL WESTMINSTER	820	Britain's biggest bank acquired a U. S. bank-holding company
57 CHARTER MEDICAL	PRIVATE GROUP	819	A hospital operator was taken private by its senior management

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THE TOP 200 DEALS

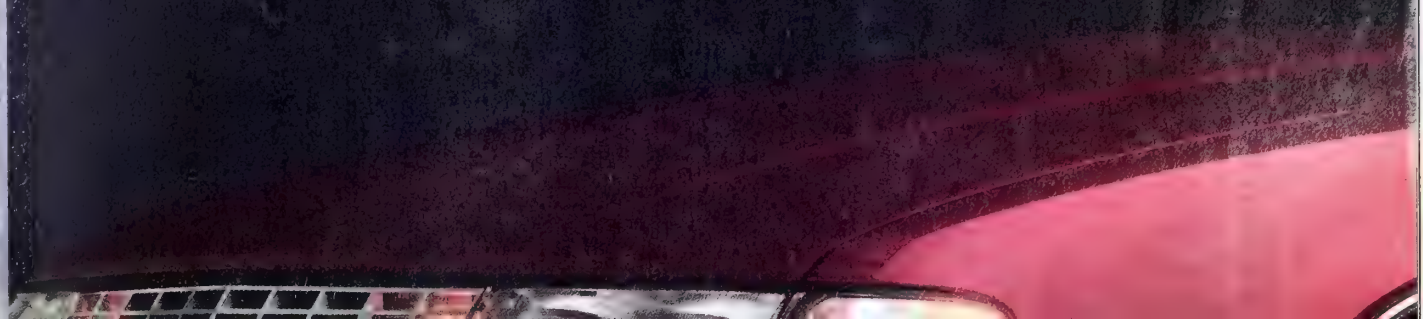
SELLER	BUYER	PRICE \$ MIL	COMMENTS
58 INSILCO	PRIVATE GROUP	813	Texas raiders Cyril Wagner and Jack E. Brown engineered a takeover of the conglomerate that once was International Silver. They beat out a competing buyout effort by management and First Boston
59 TEXACO	ARABIAN AMERICAN OIL	812	The big oil company sold a half stake in three of its refineries to the old oil consortium now owned by the Saudi government
60 ZAYRE	AMES DEPARTMENT STORES	808	The retailer sold its discount department stores to another store chain
61 STANADYME	PRIVATE GROUP	797	LBO specialist Forstmann, Little bought a plumbing and auto-products maker fleeing a takeover by manufacturing conglomerate Emhart. For other Forstmann transactions, see Nos. 47, 96, and 116
62 TECHNICOLOR	CARLTON COMMUNICATIONS	780	MacAndrews & Forbes, Ron Perelman's investment vehicle, sold the movie-film processor to a British supplier of movie and TV equipment and services; for another Perelman deal, see No. 143
63 UNITED TELESPECTRUM	CENTEL	775	A telecommunications group bought a cellular-phone operator
64 BROCKWAY	OWENS-ILLINOIS	752	One glass-container maker sold out to another controlled by Kohlberg Kravis Roberts. For other KKR deals, see Nos. 12, 17, 24, 33, 35, 73, 111, and 125
65 DUN & BRADSTREET	MAXWELL COMMUNICATION	750	The data marketer sold <i>Official Airlines Guide</i> , which publishes airline schedules and travel magazines, to British Publisher Robert Maxwell's umbrella company. For another Maxwell buy, see No. 9; for another D&B deal, see No. 20
66 STANDARD CHARTERED	BANK OF TOKYO	750	A Japanese bank, through its California First Bank subsidiary, picked up a Los Angeles bank from Britain's Standard Chartered banking group
67 CAMPEAU	MARKS & SPENCER	750	Campeau sold Allied's Brooks Brothers to the giant British retailer. For his Federated buy, see No. 2; for other sales, see Nos. 25, 38, and 138
68 INTERMEDICS	SULZER BROS.	743	A pacemaker company was purchased by a Swiss machine and heating equipment company with a division that markets orthopedic implants
69 AMERICAN MEDICAL INTL.	PRIVATE GROUP	730	The health care company sold 36 of its general hospitals to a group owned mainly by its employees
70 TENNECO	MESA LP	715	Another sale by the pipeliner. Boone Pickens' investment partnership picked up its midcontinent reserves. For other Tenneco sales, see Nos. 10, 51, 79, and 86
71 PRIMERICA	A. L. WILLIAMS	713	A financial conglomerate sold Massachusetts Indemnity to the insurance sales agency it controls. For another Primerica divestiture, see No. 112; for Primerica's sale to Sandy Weill's Commercial Credit, see No. 22
72 DIAMANDIS COMMUNICATIONS	HACHETTE	712	Created from the CBS magazine group in a leveraged buy-out less than a year ago, a consumer-magazine company was sold at a nice markup to the French publishing giant; see No. 107 for another Hachette buy
73 WOMETCO CABLE TV	CABLEVISION INDUSTRIES	710	Originally part of an entertainment group taken private by Kohlberg Kravis, these cable operations were leveraged out in 1986 by Robert Bass. Now most of the assets have been sold to a cable company based in upstate New York; for other Bass deals, see Nos. 28, 98, and 129
74 TATE & LYLE	SYSCO	700	Stripping assets from its newly acquired Staley Continental unit, the British sugar refiner sold a food-service business to a food distributor; for the Staley buy, see No. 26; for another Tate & Lyle deal, see No. 151
75 BEST PRODUCTS	PRIVATE GROUP	685	Beset by takeover offers, a discounter fled to buyout specialists Adler & Shaykin
76 MANUFACTURERS HANOVER	AMERICAN GENERAL	685	An insurance company's consumer finance unit bought the clearing-house bank's consumer services group
77 PLAYTEX HOLDINGS	PRIVATE GROUP	680	Playtex, LBOed two years ago in Beatrice's breakup, was sold again—to management again. The group, led by LBO firm Thomas H. Lee, kept hair care, spun off apparel (see No. 118). New name: Playtex Family Products
78 SHAWMUT	HARTFORD NATIONAL	679	A Massachusetts bank-holding company merged with a Connecticut group

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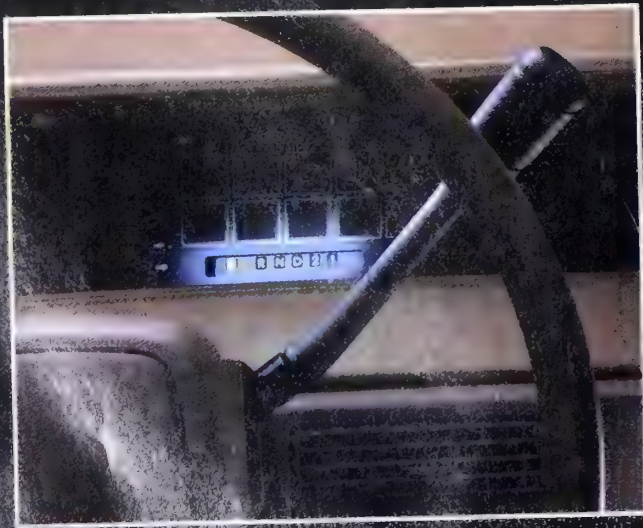
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rear-mounted antenna; auxiliary lighting; dual-note horns; power steering; automatic; Scotchgard™ Fabric Protector; reclining front seat-backs; tinted glass; twin outside sport mirrors;



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lubricated for
life, underhood
service items
labeled for easy
maintenance, a
hood held open
by gas struts
rather than a
prop rod, elec-
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**LUMINA IS MORE THAN A FLEET CAR.
IT'S A FLEET.**





Lumina Euro. Our most elegant and uplevel Lumina. With standard air conditioning, 3.1L MFI V6, special Euro trim, sport suspension and more. Ordered with either coupe or sedan, you'll find the Lumina Euro™ package an easy new way to add individuality to your fleet at a very affordable Chevrolet price.

And another example of the value that makes every Lumina perfect for your fleet.

Lumina Coupe. Until now, coupes had limited value in fleets. But now there's the 1990 Lumina Coupe: a full passenger car, or, with available front buckets, 5-passenger car that stretches out eight inches more than some other coupes in its class.

Fleet room, comfort, power and ride, plus the distinctive style and appeal of a coupe? Perfect. Just perfect.

Lumina APV. Obviously very advanced. Yet the more you look into it, the more practical it becomes. It has standard V6 power, corrosion-free composite body panel technology, easily removable seats you can arrange in a variety of configurations, and available seating for up to seven people. With its sliding passenger-side cargo door and rear liftgate, you have the access ease of a van. Yet the Lumina APV is actually shorter than our Lumina sedan.

The cargo version puts all of APV's advanced advantages to work with upfront bucket seats backed by 64.6 cubic feet of cargo capacity. And we invite you to experience for yourself Lumina APV's remarkable ride and front-drive maneuverability.

The Lumina Coupe and Lumina APV are available for fleet ordering now with delivery beginning in August 1989. And you may find either one the most perfect of all our 1990 Lumina models. For a lot of very practical fleet reasons.

WHAT MAKES LUMINA PERFECT

	Celebrity Sedan	Lumina Sedan	Taurus Sedan
OUTSIDE			
Wheelbase	104.9	107.5	106.0
Overall Length	188.3	198.3	188.4
Overall Width	69.3	71.5	70.8
Front Track Width	58.7	59.5	61.6
Rear Track Width	57.0	58.0	60.5

	Celebrity Sedan	Lumina Sedan	Taurus Sedan
INSIDE			
Passenger Room	97.9 cu. ft.	101.0 cu. ft.	99.5 cu. ft.
Front Leg Room	42.1	42.4	41.7
Front Head Room	38.6	38.8	38.3
Front Shoulder Room	56.2	58.1	57.2
Rear Leg Room	36.4	36.7	37.5
Rear Head Room	38.0	38.1	37.6
Rear Shoulder Room	56.2	57.0	57.2

	2.5L I4	2.5L I4	2.5L I4
UNDER THE HOOD			
Standard Engine			
Horsepower	98	110	90
Torque	135	135	130
City MPG	23*	21	21*
Hwy. MPG	30*	27	27*
Available Engine			
2.8L V6		3.1L V6	3.0L V6
Horsepower	125	140	140
Torque	160	180	160
City MPG	20*	19	21*
Hwy. MPG	27*	30	29*

*1989 EPA estimates with standard automatic transmission.



Let's get it together.

THE PERFECT FLEET CAR COMES WITH THE PERFECT FLEET CAR WARRANTY.

From road to roof, from bumper to bumper, virtually every part on every new Chevrolet is covered for three years or 50,000 miles.* And that includes the electrical system, air conditioning system, interior trim, engine, drivetrain and suspension, right down to the brakes and shocks.

A warranty so complete that, except for \$100 deductibles after 12 months or 12,000 miles, it may virtually eliminate repair and replacement costs for the life cycle of your fleet.

Chevrolet's comprehensive 3-year/50,000-mile Bumper to Bumper Plus Warranty protection.† The perfect fleet car warranty. Now made even more perfect by the fleet vehicles it comes with:

The 1990 Chevrolet Lumina Sedan, Coupe and APV.

*Tires are warranted by their manufacturer. †See your Chevrolet dealer for terms of this limited warranty.
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THE
Heartbeat
OF AMERICA



TODAY'S CHEVROLET
FLEET SALES



THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
79 TENNECO	ATLANTIC RICHFIELD	670	The pipeliner again—this time selling West Coast reserves to a major oil company; for other Tenneco sales see Nos. 10, 51, 70, and 86
80 CENTRAL BANKCORP	PNC FINANCIAL	664	A Pittsburgh bank-holding company bought Cincinnati's biggest bank
81 GENERAL OCCIDENTALE	PRIVATE GROUP	655	A French publisher sold its U. S. supermarket subsidiary, Grand Union, to a group led by the supermarket concern's management
82 FIRST KENTUCKY NATIONAL	NATIONAL CITY	628	A Kentucky bank-holding company sold out to an Ohio group
83 YORK INTERNATIONAL	PRIVATE GROUP	626	An airconditioning maker was bought by a group headed by Citicorp Capital
84 CSX	TOTAL	612	The transportation and pipelining company that once was the C&O sold its oil-and-gas operations to a French oil company
85 USX	PRIVATE GROUP	600	The steel and energy company sold its huge railroad and shipping lines to a group led by investment banker Blackstone Group and the unit's managers
86 TENNECO	MOBIL	590	No end to Tenneco's sell-off. Mobil bought a Louisiana refinery. For other Mobil deals, see Nos. 23 and 42; for other Tenneco sales, see Nos. 10, 51, 70, and 79
87 IU INTERNATIONAL	WEDAX	589	A transportation and environmental-services concern was acquired by a maker of customized vehicles and industrial and military equipment.
88 MARINE	BANC ONE	589	An aggressive Ohio bank-holding company acquired a Wisconsin one
89 COLT INDUSTRIES	PRIVATE GROUP	542	Recapitalized once to duck takeover, the gun maker was bought by a group led by managers and Morgan Stanley. For another Morgan deal, see No. 6
90 SINGER	CAE INDUSTRIES	542	Bilzerian sold his defense-electronics company's military-simulation and training division to a Toronto-based electronics and aviation equipment maker. For other Singer sales, see Nos. 46, 137, 147, and 168
91 BRUNSWICK PULP & PAPER	GEORGIA PACIFIC	530	A forest-products firm bought a joint venture from papermakers Scott and Mead
92 RINKER MATERIALS	CSR	515	A maker of concrete block was acquired by an Australian industrial concern
93 MOORE McCORMACK RES.	SOUTHDOWN	514	After a hard battle, one cement producer acquired another
94 ATLANTIC PETROLEUM	SUN	513	Oil trader John Deuss bought most of Atlantic Richfield's Northeastern refining and marketing, and sold them to another energy company two years later
95 ROPER	GENERAL ELECTRIC	508	The conglomerate bought a maker of cookstoves; for other GE deals, see Nos. 14, 42, and 165
96 LEAR SIEGLER	PRIVATE GROUP	507	LBO specialist Forstmann, Little, methodically disposing of pieces of the industrial conglomerate it bought out in 1987, sold its automotive-seating unit to management in an LBO. For other Forstmann deals, see Nos. 47, 61, and 116
97 McCORMICK	PRIVATE GROUP	506	The food and spice company sold a commercial real estate unit to Rouse, the real estate developer, and a New York pension fund
98 BELL & HOWELL	PRIVATE GROUP	503	What is now a data base publishing and information-storage company was taken private by a group led by Texan Robert Bass and company management. For other Bass transactions, see Nos. 28, 73, and 129
99 UAL	PRIVATE GROUP	500	The parent of United Air Lines divested the last of its non-airline operations by selling half its Apollo computerized reservations system to a consortium consisting of USAir and four foreign carriers. For a bigger sale, see No. 28
00 ARMYTEK	MARK IV INDUSTRIES	497	An automotive-products maker was captured by a defense conglomerate
01 ENTEX	ARKLA	496	A gas utility was acquired by a gas producer and distributor
02 AMERICAN CABLESYSTEMS	CONTINENTAL CABLEVISION	482	Cable consolidation as the third-largest operator bought a smaller one
03 APEX OIL	HORSHAM	476	An oil company sold its Clark refining unit to a Toronto investment company controlled by gold-mining financier Peter Munk



THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
104 CENTERRE BANCORP.	BOATMEN'S BANCSHARES	470	One St. Louis bank-holding company acquired another
105 SANTA FE SOUTHERN PACIFIC	SIERRA PACIFIC	460	The transportation company sold a timber operation to a wood-products company. For another Santa Fe transaction, see No. 41
106 EL PASO CHEMICAL	PRIVATE GROUP	456	A petrochemical company LBOed from Burlington Northern was LBOed again, by a group composed of Drexel Burnham employees and the investment firm of Gilliam, Joseph, Littlejohn & Levy. New name: Rexene, now a public company.
107 GROLIER	HACHETTE	450	The acquisitive French publisher bought the publisher of <i>Encyclopedia Americana</i> ; for a larger Hachette acquisition, see No. 72
108 PENNWALT	FISONS	442	Restructuring—in vain—to thwart takeover threats, a diversified chemical company sold its pharmaceuticals business to a British pharmaceutical house
109 CITIZENS FINANCIAL GROUP	ROYAL BANK OF SCOTLAND	440	A Rhode Island bank was bought by a British banking group
110 COMPUTERVISION	PRIME COMPUTER	434	A pioneer in computerized design was bought by a competitor
111 SAFeway STORES	VONS	425	Kohlberg Kravis Roberts, which took Safeway private in 1986, sold its Southern California operations to another supermarket, taking a big block of stock in payment. For other KKR deals, see Nos. 12, 17, 24, 33, 35, 64, 73, and 125
112 PRIMERICA	PRIVATE GROUP	406	Gerald Tsai's financial-services company unloaded Musicland, a music and video retailer, in a buyout to a group led by Donaldson, Lufkin & Jenrette. For another deal, see No. 71; for Primerica's merger with Commercial Credit, see No. 22
113 BDM INTERNATIONAL	FORD MOTOR	404	The auto giant bought a military software company
114 USG	INTERNATIONAL PAPER	400	A building-materials company sold Masonite to the big paper company
115 USPCI	UNION PACIFIC	396	A hazardous-waste-disposal company was acquired by a railroad
116 PULLMAN	PRIVATE GROUP	388	A group led by Forstmann, Little beat out an LBO by the conglomerate's management. For other Forstmann deals, see Nos. 47, 61, and 96
117 CERTAINTeed	SAINT-GOBAIN	387	A French glass company bought the rest of a glass-fiber insulation maker
118 PLAYTEX APPAREL	PRIVATE GROUP	380	Split off from Playtex Holdings at the time of the buyout (see No. 77), this was an LBO by a group led by Playtex CEO Joel Smilow
119 CULLUM	PRIVATE GROUP	380	A Texas supermarket was taken private by executives and its founding family
120 INTERSTATE BAKERIES	PRIVATE GROUP	375	A group led by management bought out a Kansas City baker
121 HERSHEY	TENNESSEE RESTAURANT	375	Abandoning restaurants, the candy company sold Friendly Ice Cream to an outfit that runs the Perkins restaurant chain; see No. 178 for another Hershey deal
122 XIDEX	ANACOMP	374	An information processor bought a maker of data-storage products
123 FIRST NH BANKS	BANK OF IRELAND	370	Ireland's second largest bank acquired New Hampshire's largest and most profitable bank-holding company
124 ESSEX CHEMICAL	DOW CHEMICAL	366	The chemical giant stepped in to purchase a chemical company after it became the takeover target of a European joint venture
125 SEAMAN FURNITURE	PRIVATE GROUP	354	A big furniture retailer was taken private in an LBO by Kohlberg Kravis Roberts. For more KKR transactions, see Nos. 12, 17, 24, 33, 35, 64, 73, and 111
126 LOCKHEED	KNIGHT-RIDDER	353	In a move to enhance its booming information-retrieval business, the big media conglomerate bought Dialog, Lockheed's data unit
127 TRANS WORLD AIRLINES	PRIVATE GROUP	351	Carl Icahn finally succeeded in taking his airline private
128 MTECH	GENERAL MOTORS	351	The auto giant's Electronic Data Systems bought a bank data-processor
129 AMERICAN SAVINGS & LOAN	PRIVATE GROUP	350	Once the jewel of bankrupt Financial Corp., the thrift was peddled to Robert Bass by federal regulators—without its bum loans. New name: American Savings Bank. For other Bass deals, see Nos. 28, 73, and 98

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THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
130 INTL. CLINICAL LABS.	SMITHKLINE BECKMAN	346	A pharmaceutical company bought another laboratory-testing concern with a specialty in drug-detection and insurance-exam testing
131 CONVERGENT	UNISYS	345	A maker of commercial information systems and defense-electronics acquired a computer manufacturer; for another Unisys buy, see No. 142
132 CONAIR	SHISEIDO	342	A hair-care company sold a hair-wave unit to a Tokyo cosmetics company
133 SABINE	PACIFIC ENTERPRISES	340	An oil-and-gas driller was acquired by a Los Angeles utility company
134 KEYSTONE PROVIDENT LIFE	LIBERTY MUTUAL	330	One insurance company acquired another
135 AMERICAN OLEAN TILE	ARMSTRONG	330	The building materials and floor-coverings company bought a ceramic tile maker
136 GENERAL MILLS	JUSCO	325	Divesting non-foods, the grocery-products company sold its Talbot's women's apparel stores to a Japanese retailer; for another divestiture, see No. 184
137 SINGER	RYOBI	325	Another sale by Bilzerian: the motor products division of his recently acquired defense electronics concern to a Japanese manufacturer. For the Singer buy, see No. 46; for other Singer divestitures see Nos. 90, 147, and 168
138 CAMPEAU	KIMCO DEVELOPMENT	325	In the aftermath of the Federated takeover, Campeau sold the Gold Circle discount chain to a strip shopping-center developer
139 RTE	COOPER INDUSTRIES	323	One maker of electrical products was purchased by another
140 MTM	TELEVISION SOUTH	320	A British TV company acquired a much larger Hollywood producer (<i>Hill Street Blues</i>) in partnership with two French TV companies
141 RKO GENERAL	WALT DISNEY	320	A station group sold KHJ-TV to the entertainment giant
142 TIMEPLEX	UNISYS	316	A supplier of voice and data communications networks was acquired by a major computer manufacturer; for another Unisys buy, see No. 131
143 FIRST TEXAS BANK	MacANDREWS & FORBES	315	Raider Ron Perelman's investment vehicle bought five troubled Texas thrifts that were peddled by the bank regulators; see No. 62 for another Perelman deal
144 CP NATIONAL	ALLTEL	314	A telecommunications concern acquired a San Francisco utility company
145 ARKANSAS BEST	PRIVATE GROUP	313	Fleeing a hostile offer, a trucking company yielded to an LBO by New York-based Kelso & Co. For another Kelso deal, see No. 13
146 METROPOLITAN BROADCASTING	SILLERMAN-MASEI	310	A closely held radio broadcaster acquired a major-market radio group
147 SINGER	PLESSEY	310	Paul Bilzerian sold Singer's electronics systems division to the British defense and electronics company; for other Singer deals, see Nos. 46, 90, 137, and 168
148 ALLIED BANCSHARES	FIRST INTERSTATE BANCORP	309	A Los Angeles bank-holding company bought an ailing Texas group—and promptly ran into earnings problems
149 WICKES	PRIVATE GROUP	307	In the throes of restructuring, the West Coast conglomerate sold off its original business—a lumber and housewares retailer—to its management
150 AMERICAN STORES	PRIVATE GROUP	305	After grabbing Lucky Stores (No. 11), the supermarket sold Lucky's Kash n' Karry to a group led by Gibbons, Green. For another GGA deal, see No. 190
151 AMSTAR	TATE & LYLE	305	Taken private by Merrill Lynch and management in 1986, the conglomerate shed assets: in 1987, beet-sugar operations; in 1988, all sugar divisions—to a British sugar refiner and its affiliate. For other Tate & Lyle deals, see Nos. 26 and 74
152 GEARHART INDUSTRIES	HALLIBURTON	304	One oil-service company acquired another
153 FLORIDA STEEL	PRIVATE GROUP	303	A steel company was taken private by a group led by its management
154 TRW	PEARSON	303	An industrial conglomerate sold off its oilfield equipment units to the U. S. subsidiary of a British conglomerate; for another Pearson buy, see No. 176
155 RESORTS INTERNATIONAL	GRIFFIN	302	Merv bought the gaming concern and agreed to sell the company's ambitious Atlantic City Taj Mahal project to his bidding rival, Donald Trump



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Power



T5200: 20MHz 386 processor, 2 internal IBM® compatible expansion slots, VGA gas plasma display with VGA monitor port, 40MB or 100MB hard disk, 2MB RAM standard expandable to 8MB, 1.44MB 3½" diskette drive.

At Toshiba, we're not only committed to making computers more portable, but also to making portables more powerful.

Which is why, in our effort to constantly improve and refine our machines, we've added three new computers to what is already the most complete family of truly portables available.

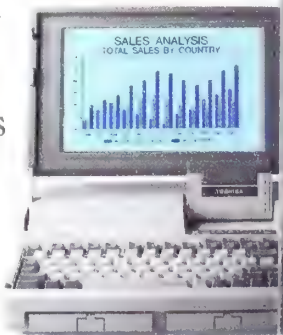
Each designed to be powerful enough to take on the increasingly complex tasks that face today's sophisticated PC users.

First, the T1600 which weighs under 12 pounds and which is the fastest battery-

powered computer we've ever made.

Second, the T3100e, the successor to our most popular machine—the T3100/2. We've made it nearly two pounds lighter and a lot faster—we've even added expansion capabilities. About the only thing we didn't add was more size.

T1600: Battery-powered 286 12MHz, coprocessor socket, 20MB hard disk at 27msec, 1.44MB 3½" diskette drive, 1MB RAM expandable to 5MB, detachable backlit EGA compatible LCD, removable rechargeable battery pack.



surge.



And finally, the T5200, which has enough power to replace virtually any desktop PC.

But we haven't just concentrated on power and portability. We've also constantly looked for ways to make our machines more durable, more reliable, and easier to use — down to the 800 number our customers can call for help with any technical question that might come up.

We figure that's what our users demand.

And it's by anticipating the growing needs of our users that we have continually found ways to make our machines weigh

less and do more. So you can work wherever you want and however you want.

All of which might make it tempting for some people to abandon their desktop for the convenience of portability. Go ahead.

We've given you the power to do it.

T3100e: 12MHz 286 with 80287 co-processor socket, internal half-length IBM slot, 20MB hard disk with 27 msec access, 1MB RAM expandable to 5MB, gas plasma display, 1.44MB 3 1/2" diskette drive.



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THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL.	COMMENTS
156 MICOM SYSTEMS	PRIVATE GROUP	301	A West Coast maker of data-communications equipment was acquired by Odyssey Partners, a New York-based buyout firm
157 INFINITY BROADCASTING	PRIVATE GROUP	301	A radio-station group was taken private by its senior management
158 FIREMAN'S FUND	AGNELLI GROUP	300	The big insurance company took on another major stockholder, the investment arm of Fiat's Agnelli family, after buying back stock from American Express, now a 20% owner. Agnelli's buy of preferred stock amounts to 18% ownership
159 GENERAL REASSURANCE	PRIVATE GROUP	300	The nation's largest reinsurance company sold off its life reinsurance unit to a group of insurance-merger consultants
160 WCI FINANCIAL	PRIVATE GROUP	300	The West Coast conglomerate, now in the throes of a buyout by Wasserstein, Perella, sold off its credit-card subsidiary to a group of the unit's managers; for another Wasserella deal, see No. 32
161 DELAWARE MANAGEMENT	PRIVATE GROUP	300	A big pension and mutual fund manager was taken private by an investment group led by Castle Harlan
162 AM INTERNATIONAL	HEIDELBERGER DRUCK	300	An office-equipment maker sold its offset printing-press business to a German company, the world's leading manufacturer of printing machinery
163 HOLLYWOOD	PRIVATE GROUP	300	A feuding Florida real estate family sold off its development and land company to a partnership led by Swerdlow-Nussbaum Properties, a development firm
164 ADAMS-RUSSEL	CABLEVISION SYSTEMS	295	A cable-TV company bought a Massachusetts-based cable group
165 GENERAL ELECTRIC	ELECTROLUX	295	The Swedish appliance maker bought the lawnmower and garden tractor business of GE's recently acquired Roper appliance unit. See No. 95 for GE's acquisition of Roper; for other GE deals, see Nos. 14 and 42
166 NIPPON MINING	DAIMLER-BENZ	290	The German industrial giant's AEG subsidiary bought Gould's industrial automation unit from its new Japanese owners; for the Gould buy, see No. 40
167 COCA-COLA ENTERPRISES	JOHNSTON COCA-COLA	285	To help finance a price-boosting stock buyback, Coke's bottling affiliate sold a Midwestern bottler to an independent Coke bottler
168 SINGER	ASTRONAUTICS	285	Another asset sale by Bilzerian, this time of Singer's Kearfott guidance and navigation unit to an aircraft instruments company; for other Singer sales, see Nos. 46, 90, 137, and 147
169 REDIFFUSION SIMULATION	GM HUGHES	283	GM's big aircraft and defense electronics subsidiary bought one of the world's largest makers of flight simulators
170 TRICENTROL	ATLANTIC RICHFIELD	283	A U. S. oil company bought a British oil company with good oil and gas reserves
171 BECOR WESTERN	PRIVATE GROUP	280	A group led by management took a mining-equipment maker private
172 AMFAC	PRIVATE GROUP	276	Stripping away its mainland holdings, the Hawaiian agricultural and real estate company sold its Lamb-Weston potato processor to a joint venture of ConAgra and Golden Valley Microwave Foods. For the sale of Amfac, see No. 50
173 TEXAS EASTERN	ENTERPRISE OIL	276	The first bite of the pipeliner's production assets by a British oil company that later bought all of Texas Eastern's leases, mostly in the North Sea fields
174 AGS COMPUTERS	NYNEX	275	The New York Baby Bell picked up a software company
175 ALLIED SIGNAL	SIEMENS	275	An industrial conglomerate sold its Bendix automotive electrical division to the German electrical products and electronics giant
176 ADDISON-WESLEY PUBLISHING	PEARSON	273	Another independent U. S. textbook publisher was snapped up—this time by a British conglomerate; for another Pearson buy, see No. 154
177 OCCIDENTAL PETROLEUM	REPSOL	272	Armand Hammer's oil company sold its interest in a Colombian joint venture to its partner, the Spanish state oil company; for another Oxy deal, see No. 31
178 CADBURY SCHWEPES	HERSHEY	270	The big British candy and soft-drink marketer sold its U. S. candy operations (Mounds, Almond Joy) to the U. S. chocolate company

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An artist's conception of the problem many companies experience with their banks.

Your company has its own unique set of problems and needs.

Your bank has its own unique set of products and services.

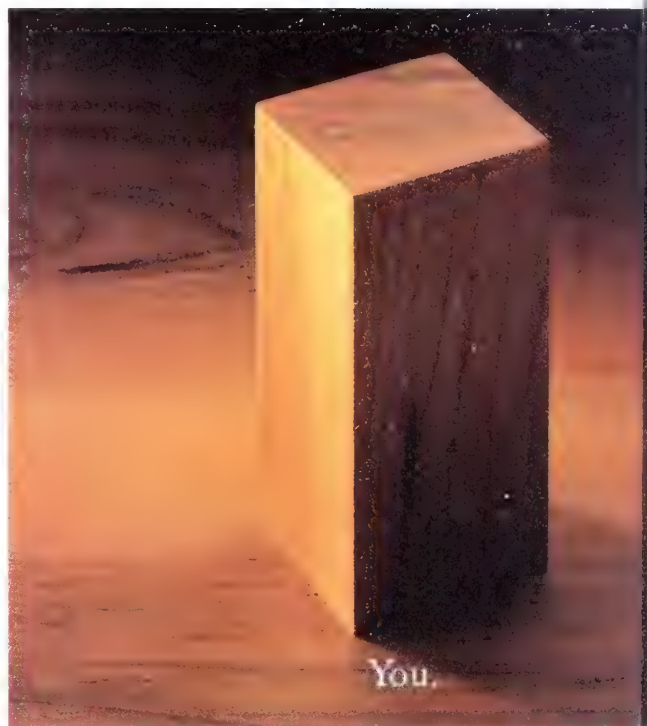
Now, a question. If you and your bank don't quite fit together, who ends up accommodating whom?

Unfortunately, the question is all too often a rhetorical one. Because in the final analysis, the real range of choice offered by most commercial banks seldom extends much beyond "take it or leave it."

But there is another choice.

Continental Bank. At Continental, we're setting the traditional concept of banking service on its ear. Peculiar as it may sound, we believe that the people doing the serving should accommodate the people being served.

We recognize, for example, that the standard, time-tested offerings of the banking industry are beginning to fail the test of time. So instead of maintaining a slavish allegiance to them, we've taken the vanguard in seeking out and developing



new products, new technologies, new ways of solving new problems.

We recognize that some bankers face the periodic temptation to give their own bottom line priority over yours. So we've removed that temptation by rewarding our people in proportion to the rewards they achieve for you.

Most important, we recognize that the banking industry has long operated according to a sort of hit-and-run philosophy, one that often neglects long-term goals in favor of short-term solutions.

So we've made it a special point to treat each client relationship as if it were an eternal pact. Simply put, we make your long-range objectives our own.

We wish we could say that we're doing all this just because we're wonderful people. But that's only part of the reason.

The other part is that we're sensible

people. Since business banking is our only business, our entire future hinges on how well we serve the varied needs of our business clients. And we're acutely aware that the hinge can swing both ways.

If you'd like us to get more specific about what Continental can do for you, call us at (312) 828 5799. No matter what shape your company's in, we're confident that you'll find us to be a very good fit.



Continental Bank

A new approach to business.™





THE TOP 200 DEALS

SELLER	BUYER	PRICE \$ MIL	COMMENTS
179 ATLANTIC RESEARCH	SEQUA	269	A maker of rocket motors was acquired by a New York-based chemicals, electronics, and aerospace concern
180 SAVANNAH ELECTRIC & POWER	SOUTHERN	266	The Atlanta-based utility holding company acquired a Savannah utility
181 DYNACORP	PRIVATE GROUP	265	A technological services company was taken private by management
182 BLOUNT	MERCURY STAINLESS	265	A closely held maker of stainless-steel products acquired the Washington Steel unit of an international manufacturing and construction company
183 KAISERTECH	ENGELNARD	264	The big chemical and metallurgical company bought a specialty-chemical unit from the aluminum company; for KaiserTech's buyout by Maxxam, see No. 55
184 GENERAL MILLS	SPIEGEL	261	Continuing its divestiture of non-food businesses, the grocery-products company sold its Eddie Bauer leisure-wear and outdoor retailer to the catalog merchandiser. For another General Mills sale, see No. 136
185 UNGERMANN-BASS	TANDEM COMPUTERS	260	A world-wide supplier of computer systems and networks purchased a specialist in local-area computer network systems
186 RALSTON PURINA	PRIVATE GROUP	260	A food company sold its Van Camp Seafood div. to a group of Indonesian investors with a background in agribusiness and fish processing
187 W. R. GRACE	PRIVATE GROUP	260	The chemical company sold its Florida phosphate operations to a group led by management. New name: Seminole Fertilizer
188 COMCAST CABLEVISION OF MD.	COMCAST	259	A cable-TV and cellular telephone company bought out the limited partnership interests of one of its cable systems
189 MORSE SHOE	PRIVATE GROUP	257	Sidestepping raider Asher Edelman, a shoe retailer was taken private by a group led by its management. For other Edelman attempts, see Nos. 48 and 49
190 FOODMAKER	PRIVATE GROUP	254	An LBO of the restaurant company by a group led by management and Gibbons, Green, & van Amerongen. For another Gibbons, Green deal see No. 150; for a prior Foodmaker buy, see No. 197
191 HANSON	PILGRIM HOUSE GROUP	254	The British-American investment and management conglomerate continued the breakup of Kidde by selling off fire-protection operations to a British electrical-products company; see No. 19 for the Kidde buy
192 FACET ENTERPRISES	PENNZOIL	249	One of the nation's largest manufacturers of automotive filters was acquired by the Houston oil concern, one of its biggest customers
193 WESTERN AUTO SUPPLY	SEARS, ROEBUCK	247	In a move to expand in the retail auto-parts industry, the retailing and financial services giant acquired the auto-parts retailer
194 RHODES	PRIVATE GROUP	242	In its first effort, Green Capital, a new LBO group, bought out a furniture retailer controlled by Atlantic American, an insurance holding company
195 CARTERET BANCORP	HOME GROUP	232	A New York-based insurance and financial-services company bought a New Jersey bank-holding company
196 FLEMING	PRIVATE GROUP	232	The nation's largest food wholesaler sold White Swan, which distributes food to restaurants, to a group led by management and Merrill Lynch Capital Partners; for another Merrill deal, see No. 151
197 CHI-CHI'S	FOODMAKER	232	The operator of the Jack in the Box fast-food chain bought a chain of Mexican restaurants; for Foodmaker's subsequent LBO, see No. 190
198 CONCURRENT COMPUTER	MASSACHUSETTS COMPUTER	231	Two computer companies specializing in simulation and modeling merged. The combined operation retained the Concurrent name
199 TYLER	PRIVATE GROUP	230	An industrial company sold off Hall-Mark Electronics, a distributor, to a group led by management and merchant bankers Riordan, Freeman & Spogli
200 PARISIAN	PRIVATE GROUP	230	An apparel chain was taken private by management and Hooker Corp., an Australian real estate developer with U. S. interests, including Bonwit Teller



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DEALS TOO LATE FOR '88

THE 20 LARGEST DEALS INITIATED IN 1988 BUT STILL PENDING, OR COMPLETED IN THE FIRST QUARTER OF 1989
THE CRITERIA FOR INCLUSION ARE OTHERWISE IDENTICAL TO THOSE IN THE MAIN LIST THAT BEGINS ON PAGE 39

SELLER	BUYER	PRICE \$ MIL	COMMENTS
1 RJR NABISCO	KOHLBERG KRAVIS ROBERTS	24717	The celebrated buyout firm scored its biggest triumph with a record-setting deal for the huge tobacco and food company, after a bitter bidding war with a group led by management. The transaction closed on Feb. 10
2 PILLSBURY	GRAND METROPOLITAN	5758	The British conglomerate bought a major American food processor and fast-food operator. The deal, initiated in October, closed Jan. 10
3 HOSPITAL CORP. OF AMERICA	PRIVATE INVESTOR	3603	A chain of for-profit hospitals is being taken private by its management
4 SAN DIEGO GAS & ELECTRIC	SCECORP	2525	After a long struggle, a California utility is giving in to a big Los Angeles-based utility holding company
5 GENERAL CINEMA	PEPSICO	1750	As it restructures, a company with a motion-picture exhibitor is selling its bottling business to the soft-drink giant
6 WEST POINT-PEPPERELL	FARLEY	1560	A Chicago investor won a bitter fight for a family-run textile company that recently won its own battle for rival J. P. Stevens
7 MERITOR FINANCIAL	FORD MOTOR	1300	Pulling back to its basic banking business, the parent of Philadelphia's PSFS savings bank sold its consumer-credit business to the automaker
8 TRIANGLE INDUSTRIES	PECHINEY	1281	Nelson Pelz sold the nation's biggest can company to a French manufacturing company. The deal closed Jan. 13, and France has been rocked every since by allegations of insider trading in the stocks
9 ROGERS COMMUNICATIONS	HOUSTON INDUSTRIES	1270	A Canadian telecommunications and cable-TV company sold its U. S. cable systems to a Texas utility company
10 HOLLY FARMS	TYSON FOODS	1149	The battle between two food companies (the other is ConAgra) to acquire the big poultry processor is still going strong. This price is Tyson's most recent, sweetened, offer, backed by a tender for stock. The battle is in the Delaware courts
11 TW SERVICES	PRIVATE GROUP	980	The food-service and restaurant company is resisting takeover by a group led by Coniston Partners, a New York LBO specialist
12 PRIME COMPUTER	MAI BASIC FOUR	850	One minicomputer company is being pursued by another
13 TIGER INTERNATIONAL	FEDERAL EXPRESS	844	Fred Smith's overnight delivery service bought a big freight airline
14 IBM	SIEMENS	844	The sale of Ralm Corp.'s manufacturing and development operations to the German electrical and electronics company marked the end of Big Blue's foray into telecommunications and telephone systems
15 CHICAGO PACIFIC	MAYTAG	784	The company that makes Hoover vacuum cleaners sold out to the kitchen and laundry appliance marketer. The deal closed Jan. 26
16 LORIMAR TELEPICTURES	WARNER COMMUNICATIONS	635	Steve Ross's entertainment conglomerate picked up a smaller movie studio. The deal closed Jan. 11
17 HOLLAND AMERICA LINE	CARNIVAL CRUISE LINES	625	A cruise-ship operator acquired the cruise and tour business of another ocean-shipping line. The deal closed Jan. 17
18 UNIVERSAL FOODS	PRIVATE GROUP	596	Backed by a British food company, two U. S.-based South Africans operating a Hyde Park Partners are chasing a U. S. maker of commercial food products.
19 NATIONAL AMUSEMENTS	CABLEVISION SYSTEMS	575	Sumner Redstone's entertainment conglomerate sold two cable systems owned by its Viacom subsidiary, plus 5% of the Showtime pay cable service, to a big cable-TV operator. The deal closed Feb. 17
20 MOBILE COMMUNICATIONS	BELLSOUTH	558	Like many of the Baby Bells, the Atlanta-based regional telephone company is racing to build a position in paging services and cellular telephone networks. It's buying a company based in Mississippi. The courts recently cleared the merger

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 * Buyout firm
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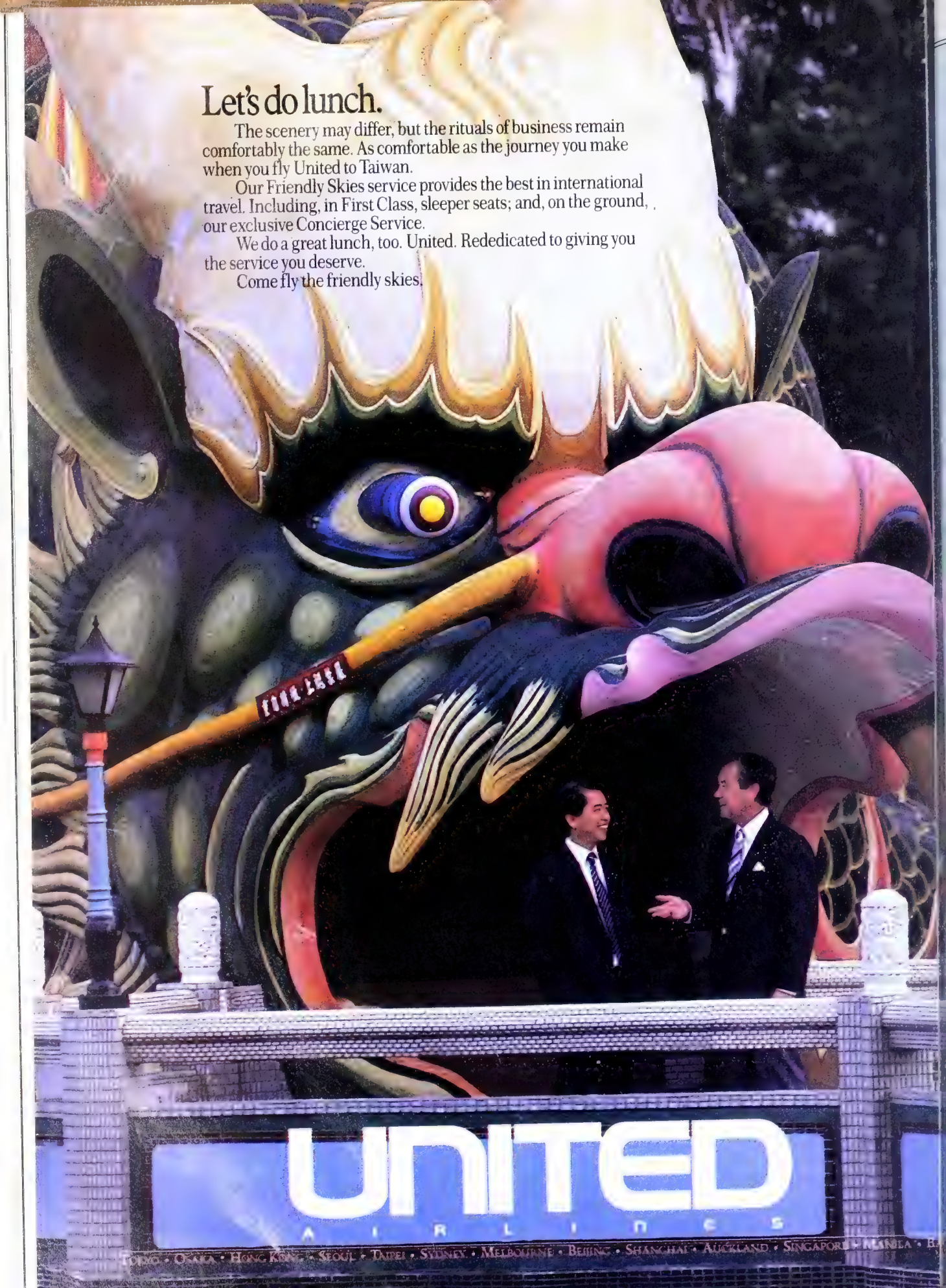
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THE UNDERVALUED 200

BROWSING FOR THIS YEAR'S STOCK BARGAINS

VALUE IS AN ELUSIVE CONCEPT, especially on Wall Street. Stock prices are one index of what a company is worth—or at least what the market thinks it is. But even in 1988, which saw a steady rise in stock prices, plenty of stocks failed to soar. Are they problems or opportunities?

Is there a way to make a reasonable judgment on which is which?

One starting point is the BUSINESS WEEK list of 200 undervalued stocks that begins on page 75. This list is based on a proven discipline for revealing companies that sell at an unusually steep discount. The candidates are culled by subjecting 1,500 of America's largest corporations to a computer run that calculates the ratio of market value to book value, defined as assets less liabilities and the par value of preferred stock. The ratio for each company is then compared with the average ratio in its industry. A "value index" is



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assigned to each company that adjusts for differences in how the market traditionally values industries: The standards are not the same for a computer company, which is in a highly valued industry and for a utility, which is in a low-valued industry. Depending on your point of view, the 200 best or worst made the list.

A computer-generated list is nothing more than a short-cut method for sniffing out intriguing research possibilities. Peter Lynch, legendary portfolio manager of Fidelity's Magellan Fund, wrote an apt warning in his book, *One Up On Wall Street*: "However a stock has come to your attention, whether via the office, the shopping mall, something you ate, something you bought, or something you heard from your broker, your mother-in-law, or even from Ivan Boesky's parole officer, the discovery is not a buy signal.... What you've got so far is simply a lead to a story that has to be developed."

THE MEMBERS OF this undervalued club are a diverse group. Some have just had a tough time of it. Asbestos-maker Manville emerged from the Federal Bankruptcy Code's Chapter 11 protection last November, while Continental Information Systems filed for Chapter 11 reorganization on Jan. 13 of this year. MCorp is another in a long list of proud Texas-based energy lenders grappling with hard times and a battered stock price. Sears, CBS, and Merrill Lynch are all strong brand-name companies struggling to master changing industry fundamentals. Coca-Cola Enterprises, the soft-drink maker's main bottling affiliate, carries a hefty debt load. But the company's business generates mountains of cash and it's 49% owned by blue-chip Coca-Cola Co. to boot.

Indeed, winnowing out good companies with bargain stock prices from troubled companies with deservedly low valuations is, as Lynch points out, a critical exercise. True, 100 companies on last year's list beat the performance of the Standard & Poor's 500-stock index, some of them by hefty margins (Manville was up 195%). On the other hand, the remaining 100 on that list lagged the S&P, including some that went into Chapter 11.

The go-go real estate player Southmark is a case history of when a bargain is not a bargain. In 1987 it was No. 69 on the list, its market value as a percentage of book value stood at 75%,

HOW LAST YEAR'S LIST PERFORMED

THE BW 200: +14.9% DOW JONES INDUSTRIALS: +12.1% S&P 500: +10.5%

THESE COMPANIES DID WELL...

COMPANY	% CHANGE IN MARKET VALUE*	INDUSTRY
MANVILLE	195%	Building materials
WHOLESALE CLUB	175	Nonfood retailing
HORIZON INDUSTRIES	155	Textiles & apparel
COMMTRON	155	Services
APL	146	Paper
VALERO ENERGY	142	Utilities
HU-MED	140	Services
R. P. SCHERER	117	Drugs
HELENE CURTIS INDUSTRIES	100	Personal care
NEW WORLD ENTERTAINMENT	100	Leisure time

*March 1988 to March 1989

...AND THESE COMPANIES DIDN'T

COMPANY	% CHANGE IN MARKET VALUE*	INDUSTRY
CARE ENTERPRISES	-99%	Services
NATIONAL BANCSHARES TEXAS	-92	Banks
TEXAS AMERICAN BANCSHARES	-85	Banks
AMERICAN CARRIERS	-83	Trucking
MCORP	-82	Banks
MAXICARE HEALTH PLANS	-81	Services
GIBRALTAR FINANCIAL	-81	Savings & loan
HBI	-74	Office equipment
L. F. ROTHSCHILD HOLDINGS	-73	Nonbank financial
GENERAL HOMES	-71	Real estate

*March 1988 to March 1989

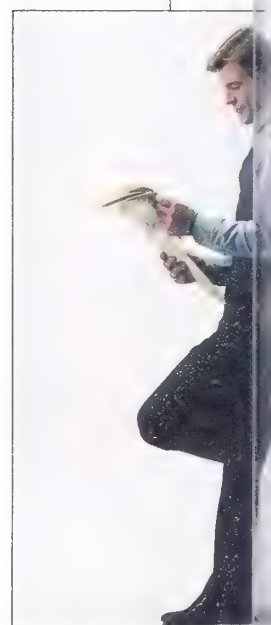
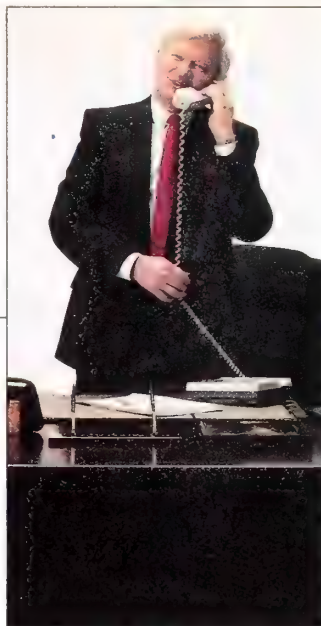
WHERE THE ACTION WAS

THESE COMPANIES WERE PUT INTO PLAY, MERGED, OR TAKEN PRIVATE

COMPANY	% CHANGE IN MARKET VALUE*	ACQUIRER/SUITOR
MURRAY OHIO MFG.	109%	Tompkins
CHICAGO PACIFIC	99	Maytag
BORMAN'S	97	A&P
GOULD	85	Nippon Mining
CONVERGENT	82	Unisys
ALLECO	72	Went Private
BURNDY	71	Framatome
ARMTEK	70	Mark IV
KAISERTECH	61	Maxxam
FOODMAKER	50	Went Private
NORTHWESTERN STEEL & WIRE	30	Went Private
MOORE McCORMACK RESOURCES	18	Southdown
FARM FRESH	15	Went Private
DINNER BELL FOODS	6	Went Private
XIDEX	6	Anacomp
PUEBLO INTERNATIONAL	5	Went Private
MUNFORD	2	Went Private
HOLLY SUGAR	-2	Imperial Sugar
FISHER FOODS	-8	American Seaway
FIRST REPUBLICBANK	-99	NCNB

From March 1988 to March 1989, or until acquisition

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC., BW ESTIMATE



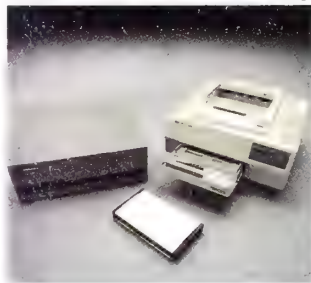
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and it carried a value index of 6.1, about average for the list as a whole. In 1988, Southmark's deteriorating finances put it 14th on the list, with a value index of 8.39 and a 17% market-to-book value. Now this company of mind-boggling complexity, with \$2 billion in debt, some 400 partnerships, and 20 subsidiaries, has risen to 5th place, an 11% market-to-book value, and a value index of 9.02. Now what? Will Southmark's stock price rebound in 1989 or is worse to come?

Gould, two years on the list, is another story. Nippon Mining Co. decided that it was a bargain, not a dog—and bought it for a shade over \$1 billion—nearly twice the market value recorded on last year's list. Altogether, 10% of 1988's Undervalued 200 were taken private or merged. That figure understates the swirl of takeover activity, however, since several companies are currently embroiled in long-running takeover sagas.

WITH ANY ANALYSIS of this kind, the long view is essential, since there is typically a lag between identifying the opportunity and the payoff. Investors typically put "a tremendous emphasis on short-term earnings," says David Dreman, head of Dreman Value Management. They overreact to bad news—hence a potentially undervalued stock. A 1985 study by economists Richard Thaler and Werner F. M. De Bondt is a case in point. They constructed portfolios out of the 35 worst-performing New York Stock Exchange stocks and the 35 best-performing ones beginning in the early 1930s. Over successive 36-month intervals, a so-called loser portfolio beat the market by an average of 19.6%, while the average winner portfolio earned 5% less than the market. Much of the change came in the second and third year.

But the Undervalued 200 is a sensitive measure even on a shorter horizon. Last year's list posted an overall gain of 14.9% from mid-March 1988, to mid-March 1989, compared with a 10.5% increase in the S&P 500 over the same period. The previous year's Undervalued 200 eked out a 1.3% rise in the year of the crash.

Strategists have pondered the Gordian knot of value. But investors need not despair. On Wall Street, price and value do merge. The trick is to profit from the moments when they are the furthest apart.

By Christopher Farrell in New York



THE UNDERVALUED 200

COMPANIES WITH THE LOWEST RATIO OF MARKET
VALUE TO BOOK VALUE COMPARED WITH OTHER COMPANIES
IN THEIR INDUSTRIES, RANKED BY VALUE INDEX

COMPANY	MARKET VALUE \$ MIL	MARKET VALUE AS % OF BOOK	VALUE INDEX	P-E RATIO	INDUSTRY
1 CONTINENTAL INFORMATION SYSTEMS	6	11	9.55	NEG	Software & services
2 MCORP	21	7	9.42	NEG	Banks
3 MANVILLE	177	15	9.31	10	Building materials
4 DATAPOINT	38	21	9.16	NEG	Software & services
5 SOUTHMARK	73	11	9.02	NEG	Real estate
6 UNR INDUSTRIES	15	19	8.72	1	Steel
7 TODD SHIPYARDS	9	23	8.59	NEG	Transport. services
8 GIBRALTAR FINANCIAL	15	10	8.43	NEG	Savings & loan
9 S. E. NICHOLS	17	37	8.39	NEG	Retailing
10 SAVIN	22	39	8.37	NEG	Business services
11 NORTH AMERICAN VENTURES	25	37	8.36	NEG	Misc. services
12 ERLY INDUSTRIES	12	47	8.34	NEG	Food processing
13 AMERICAN CARRIERS	6	31	8.29	NEG	Trucking & shipping
14 WICKES	399	34	8.22	NEG	Conglomerates
15 ADOLPH COORS	673	63	8.14	14	Beverages
16 NORTHEAST SAVINGS	36	13	8.02	NEG	Savings & loan
17 MDC HOLDINGS	46	23	7.95	NEG	Real estate
18 COMMUNICATIONS SATELLITE	452	83	7.94	8	Telecommunications
19 ARROW ELECTRONICS	70	47	7.91	16	Industrial distribution
20 MICROPOLIS	73	54	7.88	NEG	Software & services
21 EMPIRE OF AMERICA	21	13	7.88	NEG	Savings & loan
22 VICORP RESTAURANTS	120	116	7.78	NEG	Eating places
23 INSTRUMENT SYSTEMS	31	48	7.77	NEG	Appliances
24 M/A-COM	189	90	7.77	13	Telecommunications
25 FARAH	51	68	7.71	NEG	Apparel
26 AMERICAN MAIZE-PRODUCTS	107	68	7.61	74	Food processing
27 UNITED MERCHANTS & MFRS.	33	39	7.58	NEG	Textiles
28 WOLVERINE WORLD WIDE	75	72	7.57	10	Apparel
29 NORTEK	135	56	7.55	83	General mfg.
30 VILLAGE SUPER MARKET	64	128	7.55	11	Food retailing



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THE UNDERVALUED 200

COMPANY	MARKET VALUE \$ MIL	MARKET VALUE AS % OF BOOK	VALUE INDEX	P-E RATIO	INDUSTRY
31 DAIRY MART CONVENIENCE STORES	41	128	7.55	9	Food retailing
32 FOODARAMA SUPERMARKETS	39	128	7.54	11	Food retailing
33 NEW WORLD ENTERTAINMENT	62	91	7.51	NEG	Entertainment
34 GREAT AMERICAN COMMUNICATIONS	302	120	7.50	NEG	Broadcasting
35 STANDARD COMMERCIAL	130	92	7.35	20	Tobacco
36 DIANA	17	60	7.34	NEG	Misc. services
37 D. H. HOLMES	37	61	7.33	NEG	Retailing
38 INGLES MARKETS	159	140	7.33	12	Food retailing
39 WYSE TECHNOLOGY	74	48	7.31	NEG	Computers
40 WESTERN SAVINGS & LOAN ASSN.	21	17	7.28	NEG	Savings & loan
41 GOLDDOME	63	17	7.27	NEG	Savings & loan
42 RUDDICK	207	144	7.24	12	Food retailing
43 HEALTHCARE INTERNATIONAL	20	62	7.24	NEG	Health care
44 CF&I STEEL	28	41	7.23	12	Steel
45 TRANSCOM	14	50	7.23	NEG	Trucking & shipping
46 ASARCO	1155	88	7.21	6	Nonferrous metals
47 HEALTHCO INTERNATIONAL	151	105	7.17	11	Medical products
48 ENTRE	9	65	7.13	NEG	Food distribution
49 NATIONAL INTERGROUP	390	57	7.05	NEG	Conglomerates
50 RAMADA	427	140	7.05	98	Hotel & motel
51 MINISCRIBE	99	75	7.04	5	Software & services
52 CULBRO	151	103	7.02	353	Tobacco
53 AUDIOVOX	43	68	7.02	158	Industrial distribution
54 RYMER	35	85	7.01	NEG	Food processing
55 MAGMA COPPER	286	95	6.97	5	Nonferrous metals
56 INTEGRATED RESOURCES	106	59	6.93	7	Financial services
57 DOUGLAS & LOMASON	36	71	6.91	NEG	General mfg.
58 AMCAST INDUSTRIAL	86	100	6.83	9	Nonferrous metals
59 DART GROUP	156	63	6.74	7	Conglomerates
60 NATIONAL-STANDARD	39	49	6.71	55	Steel
61 A. O. SMITH	171	59	6.69	11	Auto parts
62 SENECA FOODS	64	95	6.68	20	Food processing
63 WESTMARK INTERNATIONAL	282	123	6.67	28	Medical products
64 THORN APPLE VALLEY	25	96	6.66	7	Food processing
65 AMOSKEAG	76	54	6.66	21	Textiles
66 FISCHBACH	66	67	6.56	NEG	Engineering
67 MARCADE GROUP	41	102	6.55	17	Apparel
68 ICH	237	42	6.51	59	Insurance
69 CROSSLAND SAVINGS	210	22	6.50	3	Savings & loan
70 EQUITABLE OF IOWA	206	81	6.48	8	Insurance/Retailing
71 SPRAGUE TECHNOLOGIES	223	68	6.46	17	Semiconductors
72 SCIENTIFIC-ATLANTA	358	143	6.45	11	Telecommunications
73 ALLIED PRODUCTS	85	62	6.44	NEG	Special machinery



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THE UNDERVALUED 200

COMPANY	MARKET VALUE \$ MIL	MARKET VALUE AS % OF BOOK	VALUE INDEX	P-E RATIO	INDUSTRY
74 BELL INDUSTRIES	90	81	6.40	8	Industrial distributio
75 GORDON JEWELRY	144	82	6.40	NEG	Retailing
76 CASEY'S GENERAL STORES	130	189	6.39	13	Food retailing
77 AMERICAN STORES	1723	189	6.38	23	Food retailing
78 PREMIER BANCORP	120	48	6.37	NEG	Banks
79 OXFORD INDUSTRIES	116	108	6.35	NEG	Apparel
80 COLUMBIA SAVINGS & LOAN ASSN.	152	23	6.32	5	Savings & loan
81 DIASONICS	153	137	6.30	16	Medical products
82 GM HUGHES ELECTRONICS	3269	43	6.29	13	Electronics
83 MINE SAFETY APPLIANCES	301	137	6.28	12	Medical products
84 SCHULTZ SAV-O STORES	33	194	6.28	11	Food retailing
85 UNIVERSAL HEALTH SERVICES	132	84	6.22	21	Health care
86 G. F. ATKINSON	135	73	6.21	128	Engineering
87 CRYSTAL BRANDS	235	112	6.19	16	Apparel
88 PAINWEBBER GROUP	514	73	6.19	31	Financial services
89 TANDON	66	69	6.18	8	Computers
90 CBS	4045	184	6.17	16	Broadcasting
91 LONE STAR INDUSTRIES	516	84	6.15	16	Building materials
92 CHILD WORLD	163	88	6.15	21	Retailing
93 GREAT ATLANTIC & PACIFIC TEA	1911	202	6.13	16	Food retailing
94 AST RESEARCH	81	70	6.12	18	Computers
95 ROSE'S STORES	174	89	6.09	11	Retailing
96 H. H. ROBERTSON	65	90	6.08	NEG	General mfg.
97 SEABOARD	187	113	6.04	9	Food processing
98 BRINTEC	101	160	6.03	18	Telecommunication
99 COCA-COLA ENTERPRISES	2109	135	6.02	15	Beverages
100 U. S. HOME	80	45	6.00	13	Real estate
101 DSC COMMUNICATIONS	365	162	5.99	19	Telecommunication
102 HOME GROUP	474	49	5.93	6	Insurance
103 INTERNATIONAL MULTIFOODS	364	117	5.92	12	Food processing
104 IMPERIAL HOLLY	107	116	5.92	7	Food processing
105 MEREDITH	603	161	5.92	19	Publishing
106 VOLT INFORMATION SCIENCES	82	92	5.92	95	Misc. services
107 OWENS & MINOR	114	152	5.89	14	Medical products
108 TGI FRIDAY'S	136	116	5.86	18	Eating places
109 WYLE LABORATORIES	87	94	5.85	11	Industrial distribuan
110 GULF STATES UTILITIES	959	46	5.82	24	Electric utilities
111 HOLLAND	87	92	5.77	16	Building material
112 BAXTER INTERNATIONAL	4708	157	5.75	15	Medical products
113 PITT-DES MOINES	66	97	5.75	8	General mfg.
114 GALAXY CARPET MILLS	43	70	5.71	260	Textiles
115 COCA-COLA BOTTLING	209	146	5.70	NEG	Beverages
116 PRESTON	88	77	5.68	12	Trucking & shippg

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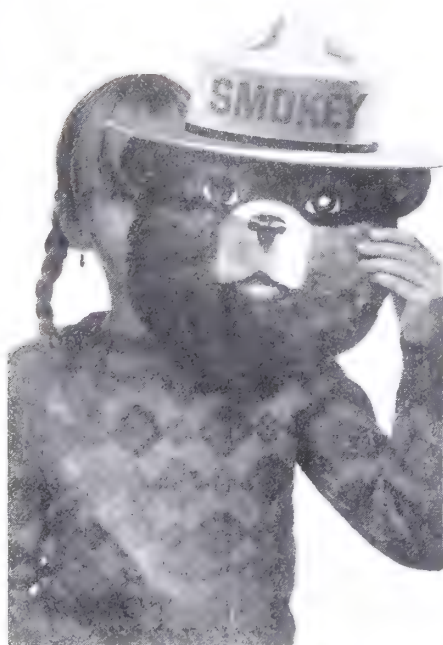


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THE UNDERVALUED 200

COMPANY	MARKET VALUE \$ MIL	MARKET VALUE AS % OF BOOK	VALUE INDEX	P-E RATIO	INDUSTRY
117 APPLIED MAGNETICS	194	110	5.67	8	Software & services
118 HIGHLAND SUPERSTORES	123	94	5.61	19	Appliances
119 AMC ENTERTAINMENT	91	163	5.56	NEG	Entertainment
120 BANNER INDUSTRIES	133	101	5.55	4	Industrial distribution
121 WESTERN DIGITAL	329	113	5.54	7	Software & services
122 WYMAN-GORDON	267	103	5.52	45	General mfg.
123 COACHMEN INDUSTRIES	71	92	5.51	18	Other leisure
124 PRIME MOTOR INNS	878	213	5.51	12	Hotel & motel
125 PACIFIC TELECOM	816	181	5.50	14	Telecommunications
126 CONSOLIDATED RAIL	2457	61	5.49	8	Railroads
127 MICROAGE	27	109	5.49	7	Business services
128 INSPIRATION RESOURCES	579	142	5.47	14	Nonferrous metals
129 MERRILL LYNCH	2893	87	5.46	7	Financial services
130 HOME OWNERS FEDERAL S&L	53	29	5.45	12	Savings & loan
131 HUGHES SUPPLY	89	100	5.43	9	Building materials
132 UNITED BANKS OF COLORADO	211	55	5.42	31	Banks
133 CARTER-WALLACE	613	207	5.41	14	Drugs & research
134 GENICOM	52	83	5.40	50	Computers
135 DATA GENERAL	500	83	5.39	NEG	Computers
136 UNIVERSAL	610	159	5.38	10	Tobacco
137 PFIZER	8891	209	5.37	12	Drugs & research
138 SUMMIT HEALTH	82	103	5.36	NEG	Health care
139 ASSET INVESTORS	109	52	5.31	3	Real estate
140 CAESARS NEW JERSEY	368	223	5.30	10	Hotel & motel
141 CONTROL DATA	886	85	5.29	717	Computers
142 BANKATLANTIC FINANCIAL	9	30	5.29	NEG	Savings & loan
143 VALERO ENERGY	344	69	5.24	24	Gas & transmission
144 HARTMARX	489	141	5.23	13	Apparel
145 AMERON	138	104	5.23	12	Building materials
146 SUN	3845	78	5.21	602	Oil & gas
147 PUBLIC SERVICE CO. OF NEW MEXICO	501	53	5.21	6	Electric utilities
148 TONKA	86	98	5.20	NEG	Other leisure
149 SCOTTY'S	181	105	5.20	43	Building materials
150 PENN CENTRAL	1641	93	5.18	18	Conglomerates
151 ITT	7118	93	5.18	7	Conglomerates
152 BINDLEY WESTERN INDUSTRIES	52	113	5.18	14	Drug distribution
153 ORION PICTURES	274	177	5.17	29	Entertainment
154 McCLATCHY NEWSPAPERS	480	192	5.15	17	Publishing
155 CAPITAL CITIES/ABC	6729	233	5.14	17	Broadcasting
156 FABRI-CENTERS OF AMERICA	59	112	5.13	78	Retailing
157 LONE STAR TECHNOLOGIES	205	73	5.12	NEG	Steel
158 CROWN CENTRAL PETROLEUM	170	80	5.09	6	Oil & gas
159 BEVERLY ENTERPRISES	522	110	5.08	NEG	Health care



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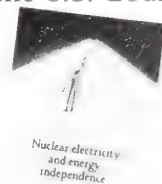
dependence by over three billion barrels since the first Arab oil embargo. And they have cut foreign oil payments by over 100 billion dollars.

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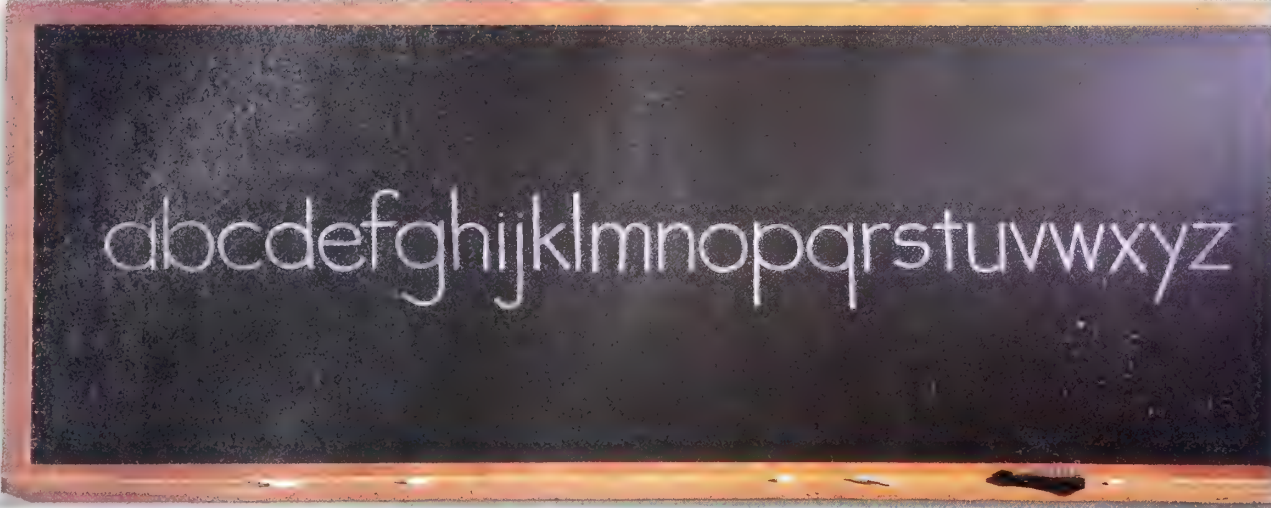
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A blackboard with a wooden frame, showing the lowercase alphabet (a-z) written in white chalk. The letters are arranged in a single line across the middle of the board.

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THE UNDERVALUED 200

	COMPANY	MARKET VALUE \$ MIL	MARKET VALUE AS % OF BOOK	VALUE INDEX	P-E RATIO	INDUSTRY
60	CROSS & TRECKER	164	102	5.06	NEG	Machine & hand tools
61	SEARS, ROEBUCK	15961	114	5.02	15	Retailing
62	DALLAS	117	114	5.01	21	General mfg.
63	PUBLIC SERVICE NEW HAMPSHIRE	153	55	5.01	4	Electric utilities
64	AVNET	807	113	5.00	16	Industrial distribution
65	SHOWBOAT	127	239	4.98	NEG	Hotel & motel
66	JERRICO	330	141	4.96	18	Eating places
67	FISHER SCIENTIFIC GROUP	592	186	4.95	16	Medical products
68	KINDER CARE	446	114	4.95	10	Misc. services
69	GREAT AMERICAN MGMT. & INV.	163	98	4.94	11	Chemicals
70	MEDIQ	58	113	4.93	NEG	Health care
71	UNITED BRANDS	579	145	4.92	10	Food processing
72	SEAGATE TECHNOLOGY	506	129	4.92	NEG	Software & services
73	DYNATECH	222	129	4.92	9	Software & services
74	UNC	141	114	4.92	18	Misc. services
75	INTL. MINERALS & CHEMICAL	967	99	4.88	16	Chemicals
76	PINNACLE WEST CAPITAL	1268	56	4.88	293	Electric utilities
77	COMMTRON	56	115	4.88	11	Misc. services
78	WENDY'S INTERNATIONAL	601	144	4.86	21	Eating places
79	TRANSAMERICA	2557	98	4.85	8	Financial services
80	GENERAL HOST	177	100	4.83	NEG	Conglomerates
81	ALLEGHANY	532	99	4.82	11	Financial services
82	PHELPS DODGE	1773	163	4.81	4	Nonferrous metals
83	ARCHER-DANIELS-MIDLAND	4205	149	4.79	12	Food processing
84	HADSON	136	85	4.78	16	Oil & gas
85	BASSETT FURNITURE INDUSTRIES	299	112	4.77	16	Furnishings
86	ANGELICA	228	154	4.77	14	Apparel
87	MAXTOR	168	133	4.73	17	Software & services
88	FIRST CITY BANCORP. OF TEXAS	388	63	4.73	NEG	Banks
89	WANG LABORATORIES	1508	95	4.72	30	Computers
90	COMPUTER FACTORY	112	128	4.71	11	Business services
91	TEXAS INDUSTRIES	303	116	4.70	28	Building materials
92	CTS	135	103	4.68	NEG	Semiconductors
93	BALLY MFG.	639	109	4.68	21	Other leisure
94	NATIONAL SEMICONDUCTOR	839	103	4.67	NEG	Semiconductors
95	SOUTHDOWN	322	117	4.65	8	Building materials
96	SSMC	239	115	4.64	NEG	Appliances
97	HEILIG-MEYERS	177	115	4.63	11	Appliances
98	JAMESWAY	153	123	4.62	16	Retailing
99	HERCULES	2138	105	4.60	18	Chemicals
00	OUTBOARD MARINE	641	110	4.60	9	Other Leisure

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EXECUTIVES



NO WATCH

EDITED BY PETER FINCH

LIKE ANY NARRATIVE, BUSINESS NEWS takes dramatic shape. All this year's 25 Executives to Watch, for example, are playing major roles at companies where the stakes are high and the risks are great—everything from plotting a comeback, to trouncing a rival, to rolling out a high-profile new product.

Some of the toughest assignments are at troubled companies, where the man at the top must pick up the pieces. John Kissick, the likely successor to Michael Milken, Drexel Burnham Lambert's junk-bond magician, has that challenge. So does Michael Carpenter, who must fix General Electric's Kidder Peabody subsidiary.

Making a multi-billion dollar merger work is another difficult task. After the predator has swallowed the prey, can it be digested? Robert Campeau struggles with Federated; Michael Miles must integrate Philip Morris' two huge food companies; Federal Express' Frederick W. Smith must absorb Tiger International.

A third situation is less obvious, but every bit as dramatic. How to keep the momentum when things are going well. The protagonists here include cable broadcaster Ted Turner, who has restored the luster to his once-troubled empire; Sun Microsystems' Scott McNealy, who seems to be doing almost everything right in the booming workstation market; and Boeing's Frank Shrontz, whose biggest problem may be too many customers for his planes.

These are just a few of the men whose stories appear in the following pages. Most of them are familiar figures to our readers, but they have more than that in common: Over the next few months, they will all mold major events—and not merely react to them.



"Management must guide the forces of change..."

— John W. Teets, Chairman



For a copy of Greyhound's latest annual report, write to Public Relations, 1618 Greyhound Tower, Phoenix, Arizona 85077

The Greyhound Corporation has been recast. From the crucible of change has emerged a new Greyhound, tempered for strength and reshaped for the future.

The job of management always has been to see the company not as it is, but as it can grow to be. The new Greyhound is the result of this vision, built through a five-year restructuring program.

Hard choices were faced; tough decisions were made. Subsidiaries with annual sales of \$3 billion,

including the company's nationwide bus line, were divested. At the same time, new businesses with excellent growth and profit potential were established or acquired.

For example, Purex household and laundry products were added to the personal care and package foods brands of Greyhound's Dial Corporation. Pre-Cruise Lines, the official cruise line of Walt Disney World, was launched. Dobbs food service for air



ers was acquired, complementing Greyhound's
ing airport and food service businesses. General
ers' RTS transit bus manufacturing and parts opera-
was purchased to expand Greyhound's top-ranked
city coach-building business.
Today, Greyhound's four business segments —
mer products, services, transportation manufac-
g and financial — produce revenues at a \$3 billion
al rate.

With the restructuring of Greyhound's core busi-
nesses completed, management is concentrating on
further improvement of operating returns. Change is
inevitable, and management must guide the forces
of change to create value for shareholders.

At Greyhound, we believe in renewing the com-
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JOHN KISSICK



HE WAS AT
THE MAESTRO'S SIDE
MAKING JUNK-BOND
HISTORY, AND MUCH OF
THE DRIVE AND STYLE
RUBBED OFF. BUT
JOHN KISSICK IS NOT
MIKE MILKEN—A FACT
OF LIFE FOR DREXEL

ton Corp. In February, the firm lost Bally Manufacturing Corp. when New Jersey regulators banned casino companies from doing business with Drexel until it resolved its legal problems. "We're facing challenges today that are as great as anything we've ever had to face," Kissick says.

DREXEL STILL INTENDS to compete for megadeals. This April it began selling a \$5 billion refinance package for RJR Nabisco. But Kissick wants to diversify as well. He plans to pursue more aggressively deals in the smaller \$150 million range and to scour overseas for other junk bond opportunities.

To craft the imaginative deals that are Drexel's trademark, Kissick will rely heavily on 42-year-old Peter Ackerman. Having helped cook up some of Milken's biggest coups, Ackerman has already proved his value. He was instrumental in the RJR deal. And by offering bondholders the chance to profit from currency fluctuations, Drexel quickly raised \$387 million for John Fairfax Ltd., an ailing Australian publisher.

Kissick certainly possesses the Milken drive. He arrives before daybreak at Drexel's fifth floor Beverly Hills office, and he talks with Milkenesque enthusiasm about the brilliance of junk bonds. But many consider Milken one of a kind. Says Bernard Sallick, whose cancer-treatment centers Milken took public in 1985: "I don't know how you replace a guy like him." Drexel can only hope Kissick is the next best thing.

*By Eric Schine in
Los Angeles*



ALAN IVERSON

Calling from a pay phone at the top of a Vail ski run on Feb. 17, American Express Co. President Louis V. Gerstner Jr. barely heard Henry R. Kravis offer him the chairmanship of RJR Nabisco Inc. "Listen," Gerstner remembers the Kohlberg Kravis Roberts & Co. partner saying, "you're our guy." But frustrated with the connection, Gerstner swooped down the slope to his vacation condominium and called the leveraged-buyout king again.

Gerstner's downhill run may be the easiest part of the epic challenge he faces as chief executive of the \$17-billion food and tobacco company. After it was taken private in a record \$25 billion buyout, RJR now has a \$3 billion annual interest bill. Combined with an eroding cigarette business and battle-weary employees who have suffered through more than two years of turmoil, Gerstner may claim rights to America's toughest job. "RJR is a management challenge that doesn't come around too often," he says.

Although the 47-year-old Gerstner has no direct experience managing this kind of business, he certainly seems suited to the job. As a fast-track financial strategist at McKinsey & Co., he helped devise plans to bail out Penn Central. During his 11 years at AmEx' Travel Related Services Co., he rang up an impressive string of earnings increases. And by fostering an environment for innovative marketing, Gerstner revived such "mature" AmEx businesses as traveler's checks.

WHILE HE HAS PROVED his mettle at stirring up stagnant businesses, there's evidence that he's an astute corporate surgeon, too. At AmEx he planned the Fireman's Fund Corp. spinoff, the exit from cable TV, and the partial spinoff of Shearson Lehman Hutton Inc. "This guy knows people, strategy, and can operate a huge com-



THE NEW BOSS OF
RJR NABISCO JUST MAY
HAVE TAKEN ON
AMERICA'S TOUGHEST
JOB. NOT ONLY MUST HE
REBUILD BATTERED
EMPLOYEE MORALE AND
TURN AROUND
THE ERODING TOBACCO
BUSINESS, HE ALSO
FACES A \$3 BILLION
ANNUAL INTEREST BILL

pany on an international level," says Goldman Sachs & Co. analyst Lawrence S. Pidgeon.

Beyond rebuilding morale, Gerstner first will have to raise some \$6 billion to repay bank loans due in two years. It's too early to say what he might sell, but the most likely candidates are RJR's Del Monte canned goods and tropical fruit lines, its Planters Life-Savers unit, and some of Nabisco's international food operations. But Gerstner has already assured RJR workers he won't bust up the company. And he vows to turn around its aging cigarette business.

Hard as that will be to accomplish, Gerstner may find it even harder to glue back together an innovative and winning marketing culture at RJR. In short, he's facing not an exhilarating downhill run, but a grueling cross-country trek.

By Scott Ticer in Atlanta



LOUIS GERSTNER

Four vertical rectangular tags are shown side-by-side. Each tag features a circular logo at the top containing a stylized 'S' surrounded by a laurel wreath. Below the logo, the tag is divided into two sections by a horizontal line. The top section of each tag contains the word 'Sheraton' in a serif font, and the bottom section contains a specific brand name in a bold, sans-serif font. The four tags are labeled 'Hotels', 'Inns', 'Resorts', and 'Suites' from left to right.

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ITT

The guys at Polaroid to shoot each other



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With an MBA from Stanford University and a fondness for preppie polo shirts, Scott G. McNealy is an unlikely revolutionary. But the CEO of Sun Microsystems Inc. put on the radical's mantle a few years ago when he began preaching that all workstations be created equal. If manufacturers adopted a single hardware and operating system standard, he argued, they would make possible the sort of off-the-shelf software that drove the personal computer explosion. The idea was heresy to an industry dedicated to high-margin proprietary systems that lock customers in to one manufacturer. But McNealy pressed ahead. He even offered up the



SUN LAUNCHED A
COMPUTER REVOLUTION
BY OFFERING ITS SPARC
MICROPROCESSOR TO
COMPETITORS. THAT
BROUGHT A SLEW OF BIG-
NAME CUSTOMERS, BUT
NOW RIVALS ARE
BREATHING DOWN
MCNEALY'S NECK

heart of Sun's own workstation, the homegrown SPARC microprocessor, to any competitor who wanted to clone it.

Some big-name companies have jumped at the chance. Despite second place from others, American Telephone & Telegraph, Unisys, Fujitsu, and others last year licensed SPARC for their own machines. Customers also seem to regard Sun as a standard-setter. Last year the six-year-old company's market share jumped four points to 28%. Profits are expected to surge 80%, to nearly \$120 million, on sales of around \$2 billion for the year ending June 30.

But McNealy, 34, must fight to stay in the vanguard of his own revolution. Chip heavyweights Intel Corp. and Motorola Inc. recently took direct aim at Sun by introducing their own SPARC-like standards. A new workstation from Digital Equipment Corp. and another from IBM, expected this spring, will also attempt to set rival standards. "I feel like a clay pigeon in a skeet shoot," says McNealy.

HE'S NOT SAFE from companies following Sun's blueprint, either. The first clone, made by Solbourne Computer Inc., is already on the market. McNealy spent \$140 million last year and is spending \$250 million this year to maintain Sun's technological lead. In April Sun virtually replaced its entire product line with five new systems.

Wall Street still has cold feet. Competing machines are likely to slow Sun's order rate, and Sun's production turnover could hurt margins until production is in full swing. Sun's stock now trades at the same level as a year ago, 16½, dragging its price-earnings ratio down to 10 from a once-lofty 14.

McNealy's crusade has produced results faster than he expected. "I'd have liked the clones to come a little slower," he says. Yet Sun is still No. 1 in the market. If he can keep it that way, the one-time radical may wind up heading a new Establishment.

By Jonathan E. Leake in San Francisco

SCOTT MCNEALY

Quality is Job 1.



Profile in quality #8: Control.

At Ford, Mercury and Lincoln every car and truck we build is designed to put the driver in control. It's called human engineering—the interaction of man and machine. From the feel of the road, to the feel of the wheel, to the touch of a button, its objective is to provide the driver with comfort, confidence and ease of operation. When quality is job 1—you don't do it any other way.

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and trucks in the world.**



le up—together we can save lives.

FRED SMITH

Frederick W. Smith, who learned to fly as a teenage cropduster, has a daredevil streak not shared by many executives. Years ago, piloting a company plane from Little Rock to his Memphis headquarters, the chairman of Federal Express Corp. flew part of the way upside down. These days Smith has a big family at home and doesn't go in for such stunts anymore, but he still takes big risks in business. In December, Smith made what may be his grandest gamble yet: the \$880 million acquisition of freight hauler Tiger International Inc.

Smith's move could pay off in spades. His air-express giant's foreign operations have been a drain for several years. But by acquiring Tiger's prized squadron of long-haul aircraft and its vast network of international routes, Smith has suddenly made Federal the dominant carrier in overseas freight. The 44-year-old chairman should soon realize his dream of two-day, door-to-door service between most points on the map. "In one fell swoop, Federal has built a global network that's going to be hard to match," says Greenwich (Conn.) consultant James Neff. Wall Street apparently agrees: It has boosted Federal's beleaguered stock 5 points, to around 50.

The ex-Marine's surprise deal has sent competitors scrambling. Already, Consolidated Freightways Inc. has tried to acquire Emery Air Freight Corp. in the first of what analysts be-



FEDERAL EXPRESS
BORROWED \$1.4 BILLION
TO BUY FLYING TIGER.
A RISKY MOVE, BUT IT
MAY BE ESSENTIAL TO
SUCCEED IN THE
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FOR DELIVERY SERVICES

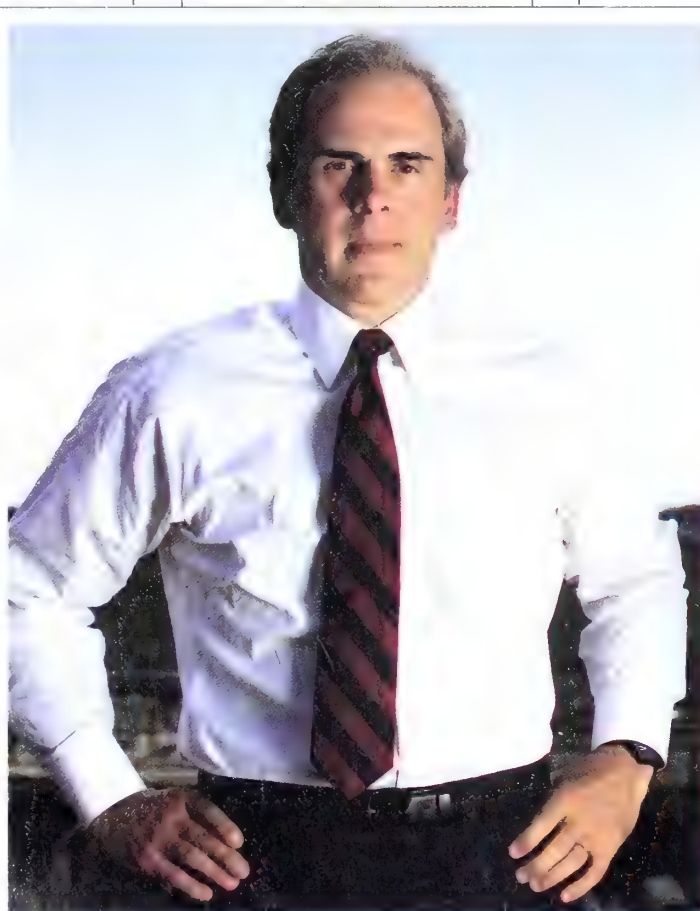
lieve will be many mergers in the growing airfreight industry.

Taming Tiger will be no small feat, though. With his plans fully to integrate Tiger's heavy-cargo business, Smith will be thrusting Federal into a market more cyclical and capital-intensive than its traditional small-package business. By taking on \$1.4 billion in debt, plus an additional \$600 million in goodwill, Federal could find itself too heavily leveraged if a recession prompts shippers to seek out slower, cheaper transportation. And Smith could encounter culture shock as he attempts to mesh Tiger's heavily unionized work force with Federal's gung-ho, entrepreneurial troops. Says

one former Federal executive: "Combining these companies could be like mixing oil and water."

STILL, THE MERGER may be just what Federal needs. The nation's love affair with facsimile machines has stunted demand for Federal's document business, threatening to erode as much as 30% of that market. The accelerated rumble of United Parcel Service Inc. into overnight shipping has also sparked rampant price-cutting, which helped pare Federal's per-package revenues 16% in recent years. By squaring Federal's marketing muscle behind its box traffic, as opposed to documents, Smith thinks that he can restore Federal's operating margin to about 16% from its current 10%. And with Tiger International in his fold, the odds are starting to look a lot more in Smith's favor.

By Dean Foust in Memphis



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drug's first year, Swanson had proclaimed it would sell twice that much. Once-loyal analysts and investors bailed out. In 1988, Genentech's stock plummeted 62%, to just above 14.

Swanson, 41, is not a man who admits mistakes easily. Associates say he took 1988 hard, especially since it touched off an exodus of many longtime employees. Progress with a potential AIDS treatment pushed the company's stock above 19 in early 1989, but in late March the company suffered another blow: *The New England Journal of Medicine* published a study suggesting the clotbuster was no better than streptokinase, a competing drug selling for a fraction of the cost.

Swanson still maintains that his goal of being a billion-dollar company is within reach in the 1990s. But until then, the road looks far from smooth.

THREE CRITICAL TASKS loom, observers and former executives agree: First, since the company's fortunes are so closely tied to TPA, he must make TPA's marketing strategy work by expanding the use of clot-busting drugs. Genentech has been stung by claims that it simply priced TPA out of reach at \$2,200 per shot—a charge Swanson denies. The new study will increase pressure to cut prices, but few expect such a move before next year. Instead, Genentech will increase its sales force by 30% by June. It's also working much more closely with doctors.

Secondly, Swanson must mend fences with Wall Street. And perhaps most important, he must give top priority to retaining the company's phenomenally talented scientific squad.

Not surprisingly, the former venture capitalist refuses to dwell on the past: "We had a very successful launch of a new drug and we've got wonderful cash flow." But until new products begin to broaden Genentech's portfolio and earning power, Swanson can expect to spend more time in the hotseat. *By Joan O'C. Hamilton in San Francisco*

For more than a decade, calling Genentech Inc. a Wall Street "darling" was something of an understatement. Genentech's scientific prowess and rigorous financial controls helped make it the world's premier biotechnology company. At its peak in 1987, Genentech's market valuation was an astounding \$5.4 billion.

But the reckoning came in 1988. The weekly "ho-ho" beer bashes—presided over by Genentech's intense chief executive, Robert A. Swanson—turned into wakes for a stock price that plunged so quickly it left a vapor trail.

What happened? Disappointing performance from Genentech's much-heralded heart-attack drug, TPA. Although it sold \$170 million worth of TPA in the



AFTER THE 1988
DEBACLE, WHEN
GENENTECH'S STOCK
PLUNGED 62%, SWANSON
CAME UNDER ATTACK.
WHILE THE COMPANY
SHOWS SIGNS OF
RENEWED HEALTH, HE
MUST MEND FENCES ON
WALL STREET

ROBERT SWANSON

A large, dark tree trunk with a rectangular cutout in the center. Through the cutout, a forest of smaller, green pine trees is visible against a light sky. The cutout is framed by the rough bark of the large tree. The overall image is a composite of a photograph and a painting.

Work with the forest as if your future depends on it.

The paper industry was facing a no-win situation. Paper demand was growing dramatically, but overharvesting the forest would jeopardize the future.

At BASF, we looked at the problem in a new way. We found a practical, long-term solution that our paper customers could apply immediately. The key was in the paper making process. We developed a way to extract more paper pulp from each tree. Each one becomes, in effect, a super tree. Fewer trees are needed. Demand is met. The future isn't jeopardized.

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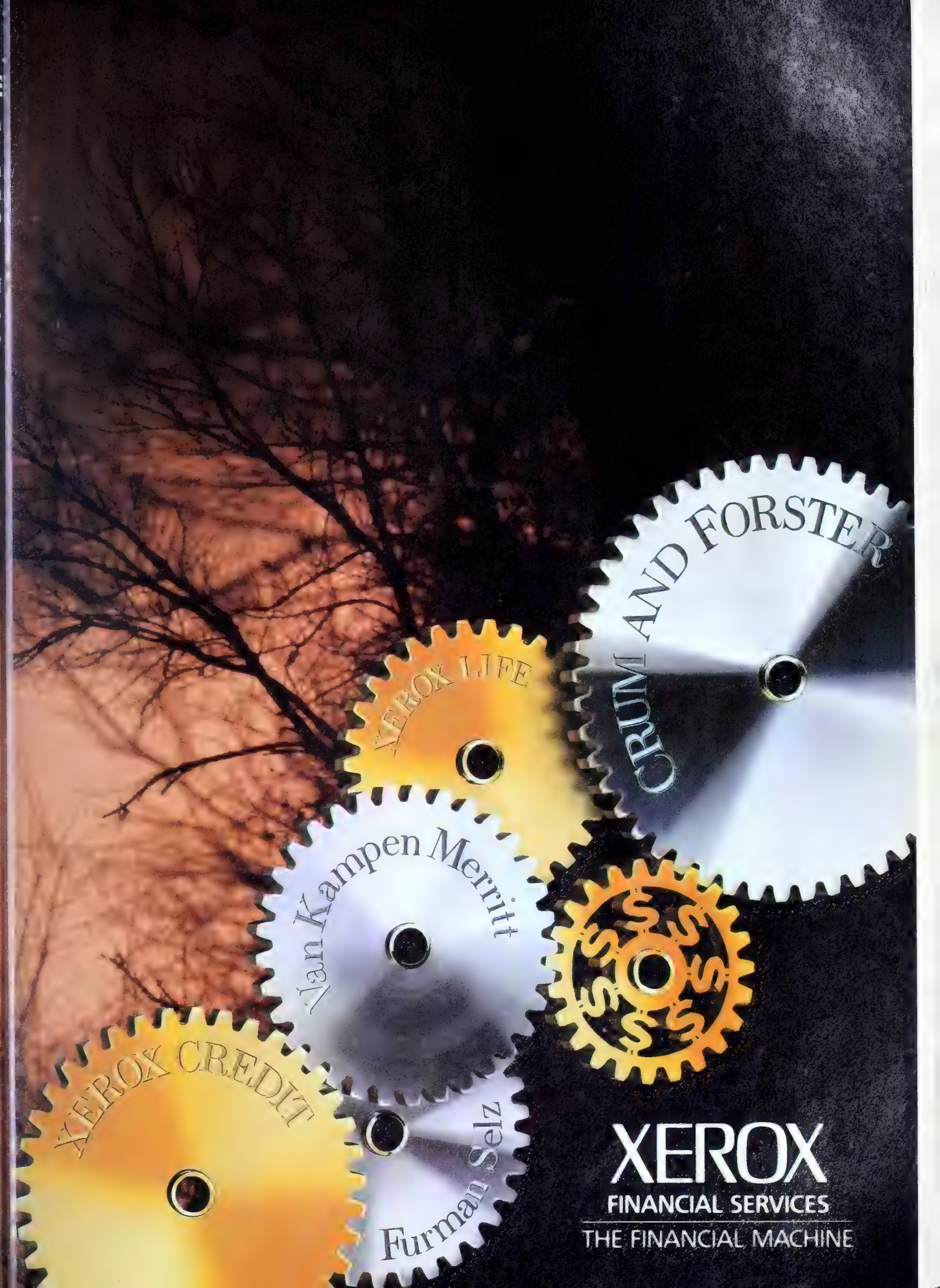
anything from a fleet of fishing vessels to a Xerox copier from Xerox Credit Corporation.

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ROBERT ALLEN

W

hen Bob Allen took AT&T's helm after the death of Chairman James E. Olson in April, 1988, it looked as if the giant telecommunications company was in for quieter times. Olson, after

all, was a passionate, impulsive manager with a fiery speaking style to match. Allen is just the opposite: quiet, deliberate, and somewhat shy.

So much for first impressions. Robert E. Allen, the 13th chief executive of American Telephone & Telegraph Co., is rapidly becoming one of its most aggressive. In just the past nine months, Allen, 54, has won looser regulation of AT&T's long-distance phone

business. He has made millions of dollars worth of acquisitions and plans to make more, most likely in the computer and credit services areas. And he's improving AT&T's sales focus by breaking it into 19 smaller, more autonomous businesses.

Allen's No. 1 challenge is to keep \$35 billion AT&T head of international rivals in the global telecommunications business. With competitors gaining strength in the U.S., AT&T must offset their intrusion by capturing more foreign market share in phone services and equipment. Allen is ready to make acquisitions. He's also pressing for new products and bottom-line improvements in its loss-plagued computer business, which up until a year ago seemed ready to crash.

Already AT&T is making headway. In long-distance it turned a record



AT&T'S NEW CHIEF
EXECUTIVE MAY BE
LOW KEY, BUT HE IS
MAKING ACQUISITIONS
AGGRESSIVELY. THE
GOAL: BOOSTING
MARKET SHARE TO
COMPETE BETTER ALL
OVER THE WORLD

\$2 billion profit in 1988. And better sales diplomacy has given it a leg up on rivals for overseas equipment markets such as Italy and Spain.

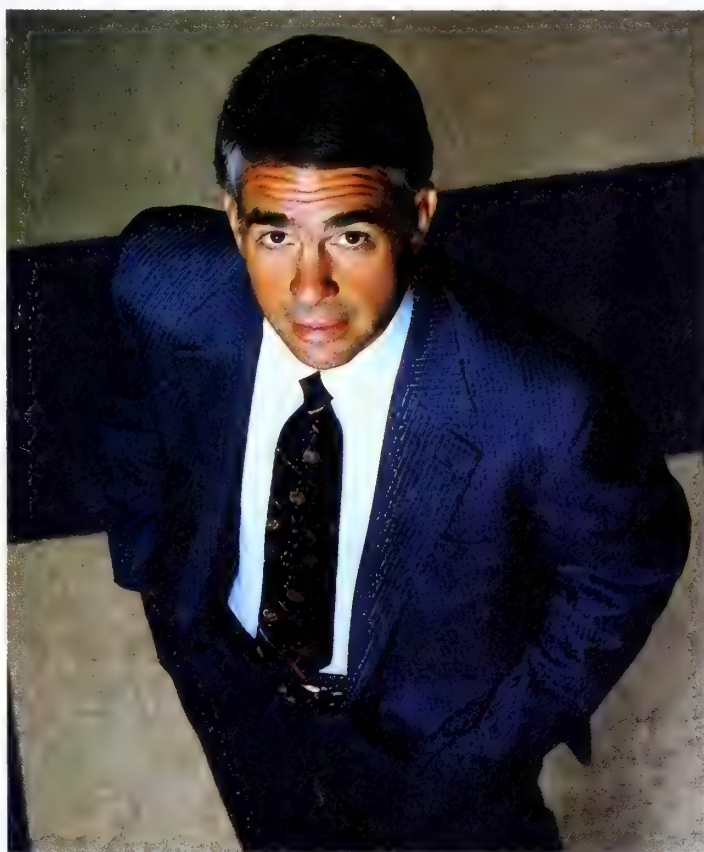
EVEN THE COMPUTER business is improving. The market for computers that use the Unix operating system, designed by Bell Laboratories, is growing more than 20% a year. And AT&T has won a few huge contracts such as a recent multibillion-dollar order for computers from the U.S. Air Force.

Allen stepped into his job at a difficult time. The company's breakup in 1984, the largest corporate divestiture in history, left employees shell-shocked. To stay competitive with emerging rivals such as MCI Communications and Northern Telecom, AT&T

had to drive down costs and cut more than 75,000 jobs. Olson had just begun to win back worker confidence when he died, leaving AT&T's reconstruction up to Allen. Some managers accustomed to the hard-charging Olson at first found their reserved new chairman to be a downer. Not anymore. Says one insider: "AT&T's alive. We're moving. People are smiling again."

Allen works hard for those smiles. He logs 20,000 miles a month in the corporate jet, meeting with managers and getting to know his employees around the world. "Sometimes it's hard to believe that I'm in charge of all this," he says in a rare display of introspection. "All of these people, counting on me." By now, at least, they know he gets things done.

By John J. Keller in
New York



ANDY FREERBERG

**Why spend
money on
computers
when you
can make
money on
computers?**

UNI

Most CEO's and senior managers look at computer operations as cost centers, not profit centers.

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The power of ²**

UNISYS



versals. Cohen, 42, had enjoyed an almost continuous streak of success since taking the helm of Shearson in 1983. After masterminding shrewd takeovers of Trade Development Bank in 1983 and Lehman Brothers Kuhn Loeb in 1984, he was the toast of Wall Street. More recently, he helped the firm emerge as a leader in the profitable mergers-and-acquisitions field.

NOW COHEN MUST get his house back in order. The firm's stock price is mired at around 17—about half the level of two years ago. That can't sit well with American Express Co. It owns 60% of Shearson and, some analysts say, may cut its investment to less than 50%.

Cohen's biggest concern is the E. F. Hutton brokerage unit, which Shearson acquired for \$962 million in December, 1987. Hutton is a drain on earnings. To cut costs, analysts expect Cohen to close about 50 branches.

For Cohen, no setback in 1988 stung more than Shearson's failure to pull off the \$25 billion RJR Nabisco deal. He personally took charge of the negotiations of what turned out to be the biggest acquisition of all time. Analysts say a Shearson victory would have netted the firm \$200 million in takeover-related fees. But apparently Cohen erred in approving a low opening bid of \$75 a share—and there's some feeling on Wall Street that Cohen was out of his depth.

The blunder won't help Shearson's chances of winning the next giant M&A deals; nor does the recent departure of merchant-banking chief Peter J. Solomon. And, finally, neither does American Express's reluctance to do hostile deals. But Cohen insists the firm will still go after big transactions. "You're going to see a broadening of the organization," he says. "We'll be elevating younger, bright people." But Cohen acknowledges that the firm won't regain its status as a highflier overnight.

By Jon Friedman in New York

You can bet that for Peter Cohen, 1988 was one of those years. In November he was roasted for mismanaging Shearson Lehman Hutton's bidding for RJR Nabisco. And just before Christmas, financial scandal hit Shearson's Boston Co. unit, and Cohen was forced to fire its president. Shearson's earnings fell to 81¢ a share, from \$1 in 1987. "We stumbled," Cohen concedes. "We were trying to accomplish too many things in too short a time frame."

Things haven't been all that great in 1989, either. In March, Shearson abandoned its ingenious effort to create a lucrative new security: the much-publicized Unbundled Stock Unit.

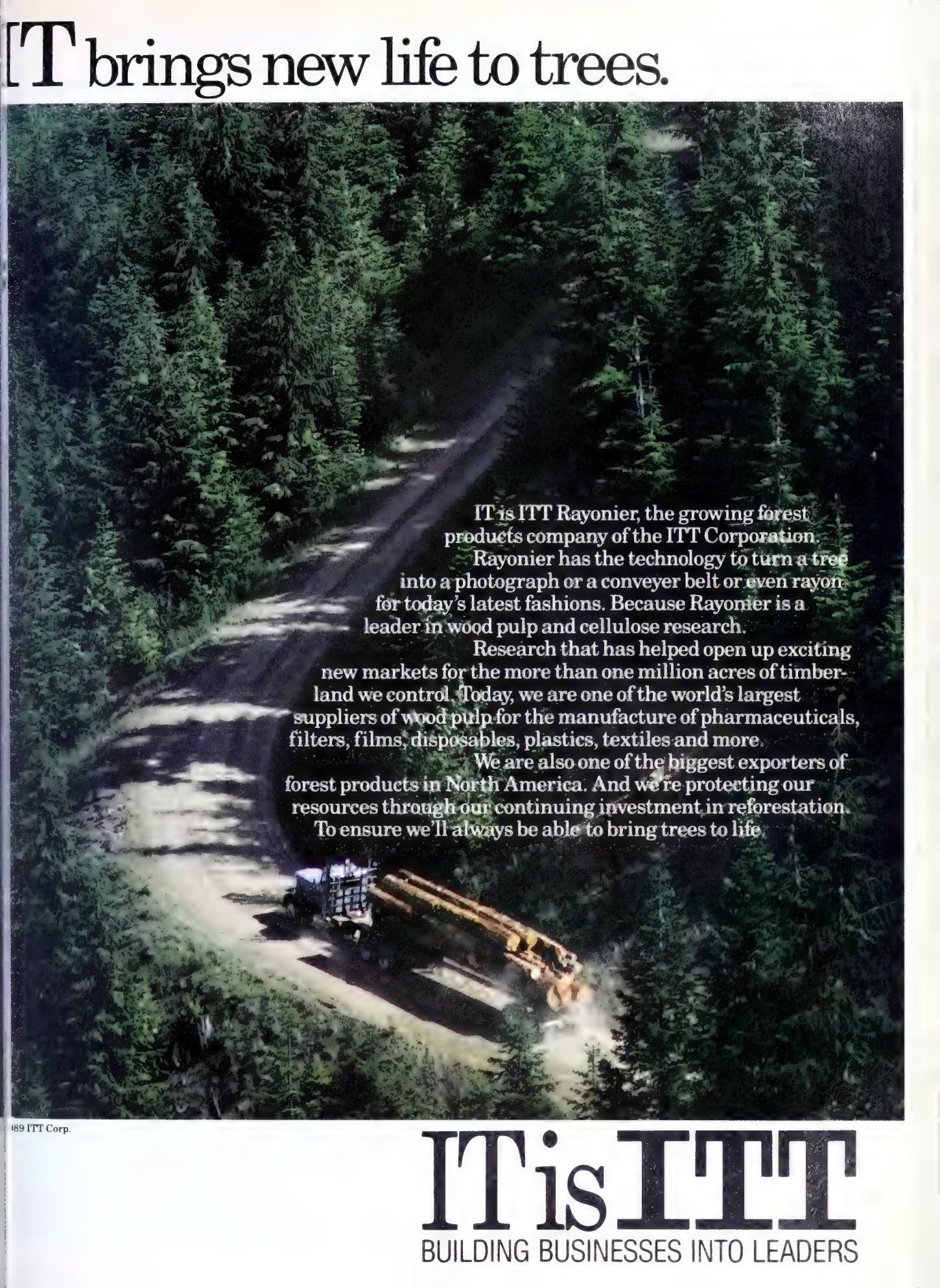
It has been a series of stunning re-



SHEARSON'S BOSS WAS
TROUNCED IN THE
HEADLINE-GRABBING
RJR NABISCO WAR. SO
NOW HE HAS TO POLISH
HIS IMAGE AT
AMERICAN EXPRESS
AND IMPROVE
PERFORMANCE AT
E. F. HUTTON

PETER COHEN

IT brings new life to trees.

An aerial photograph of a logging truck driving on a dirt road through a dense forest. The truck is carrying a large log. The road is surrounded by lush green trees, and the scene is captured from a high angle, showing the path of the truck through the forest.

IT is ITT Rayonier, the growing forest products company of the ITT Corporation.

Rayonier has the technology to turn a tree into a photograph or a conveyor belt or even rayon for today's latest fashions. Because Rayonier is a leader in wood pulp and cellulose research.

Research that has helped open up exciting new markets for the more than one million acres of timberland we control. Today, we are one of the world's largest suppliers of wood pulp for the manufacture of pharmaceuticals, filters, films, disposables, plastics, textiles and more.

We are also one of the biggest exporters of forest products in North America. And we're protecting our resources through our continuing investment in reforestation. To ensure we'll always be able to bring trees to life.

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BUILDING BUSINESSES INTO LEADERS

NEXT FALLING DARTS: Robert Campeau has been keeping an unusually low profile—by design. Stung by speculation that he's overextended, the mercurial Canadian entrepreneur has decided to bite his tongue and let the results from Bloomingdale's and his other stores do the talking.

They'd better start speaking up. Even after massive asset sales, parent company Campeau Corp. and its Federated and Allied retail units have \$9.5 billion in debt. Interest charges alone will chew up more than \$743 million in cash flow from the department stores this year. To outsiders, it looks as if Campeau, 63, has little room for error.

Campeau and his top executives don't see it that way. They say they have trimmed more than \$300 million in yearly overhead from the retail empire Campeau began assembling two years ago. And buoyed by a surprisingly strong Christmas, they think the remaining store groups are positioned to help Campeau carry out his long-range real estate plans.

GOING DEEP INTO hock to enter the retailing game was only a means to an end for Campeau. Real estate development has been his love for more than 30 years, and controlling almost 50 million square feet of retail space puts him in a strong position to indulge that passion. His largest project, now under way, is the \$650 million development in Chicago. The \$650 million development includes a major addition to his flagship Jordan Marsh Co. department store, a new Bloomingdale's, and two new office towers.

Campeau and Ohio shopping-center developer Edward J. DeBartolo are planning several similar mixed-use projects. So far, they have fallen far short of their announced plan to build 1 to 10 new shopping centers a year in the year since he made that prediction.



THIS CANADIAN
DEVELOPER HAS
AMBITIOUS PLANS TO
USE HIS NEW RETAIL
EMPIRE TO SPEARHEAD
SHOPPING-CENTER
EXPANSION. BUT IT ALL
DEPENDS ON WHETHER
THE STORES DO WELL
ENOUGH TO LET
CAMPEAU PAY DOWN
HIS HUGE DEBT

Campeau seems to have moved more toward redevelopment projects. He still wants to expand the Bloomingdale's chain nationally and into Canada, but the pace will be somewhat slower than he anticipated at the start.

For Campeau to succeed, retailing chief John W. Burden III and operations chief James M. Zimmerman must quickly boost cash flow. Critics doubt that they can, and rumors continue to circulate that Campeau may be forced to sell one or more of the chains to pay down debt. Insiders insist that's not in the cards. But they do confirm one rumored possibility: Campeau may take the company private. It's easy, since he and the Reichmann family of Toronto already own 77% of the stock. But don't expect Campeau to hide his light under a bushel forever. If he makes it as a retailer, he'll certainly want the world to know it.

By Chuck Hawkins in Toronto



ROBERT CAMPEAU

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ESTIMATE

Client: Scott Tuthill
Address: 675 Deer Park Road
City: Boise
State: ID Zip: 83703

Project: West Wing Addition
Project No: MC66224-89
Client Phone: 619-555-2887

Description	Materials	Labor	Total
Hardware	1,709	0	1,709
Painting	1,440	9,000	10,440
Concrete	15,000	9,000	24,000
Plumbing	3,250	3,000	6,250
Carpet	1,500	895	2,395
Lumber	11,000	0	11,000
Framing	0	7,250	7,250
Electrical	811	1,000	2,211
Supervision	0	2,600	3,600
Clean Up	0	0	1,344
Permits	898	0	898
Total			71,097

Comments: The estimate above is based on constructing the West Wing according to the plans and working drawings submitted for Scott Tuthill by Jarl Johanssen and Associates, architects. The construction would be completed within 12 months of breaking ground.

Signature: _____

HOME MADE CONSTRUCTION

P.O. No: A398624-89
Project No: MC66224-89
Vendor: Pine Tree
Address: 12311 Ind
City: Boise
State: ID
Lumber:
2x4x
4x4x
2x4x
4x4x
2x4x

Tuthill
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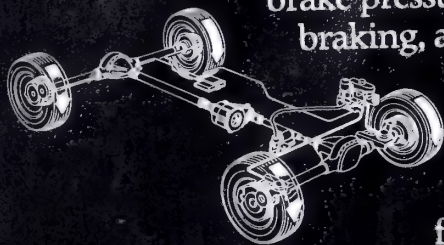


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more controllable stops. That's the beauty of ABS. But it's not the only beauty from all the beauty of Cherokee Limited. There's the beauty of Selec-Trac®, another Jeep exclusive. It's the only shift-on-the-fly four-wheel drive system that gives you the security of full-time four-wheel drive on any surface, on road or off. And



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70 now every Jeep comes with Chrysler's exclusive 7-year/100,000-mile Protection Plan.** For further information, call 1-800-JEEP-EAGLE.

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*Source: Kelley Blue Book: November/December 1988, analyzing resale values of 1985, '86, '87, and '88 model year vehicles.

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UNISYS IS STRONGER
THAN EITHER OF THE
COMPANIES THAT
MERGED TO CREATE IT.
BUT THERE ARE STILL
BIG PROBLEMS: A
PENTAGON PROBE, A
MAJOR LAWSUIT, AND
DELAYS IN GETTING
PRODUCTS TO MARKET

For inspiration, W. Michael Blumenthal likes to read economist Joseph Schumpeter's treatise on "creative destruction," which holds that capitalism needs turmoil to remain vital. That should come as no surprise to anyone who has followed Blumenthal's Unisys Corp. Ever since he engineered Burroughs Corp.'s acquisition of Sperry Corp. to form Unisys in 1986, he has wrought wrenching change at the computer giant. Says Blumenthal: "If you are not brutal about moving quickly to cut costs and make your bets on new technology, then you will have trouble."

Yet Blumenthal, 63, still has plenty of trouble. He aims to secure Unisys' hold on its maturing mainframe market with upgraded machines while moving fast into the small-computer arena. But optimistic projections and glitches in the company's new mainframes left Unisys with \$2.5 billion worth of inventories from last year.

Other headaches loom. Former Sperry executives who allegedly had cozy relationships in Washington procurement circles have put some of the company's \$2.5 billion defense business at risk, since they are under scrutiny. Three Sperry plants were suspended from new government contracts after guilty pleas by a former executive and a former consultant. Blumenthal says the company is cooperating completely. Meanwhile, Honeywell Inc. has sued for \$300 million over disappointing Sperry Aerospace operations that Honeywell bought in 1986. Unisys could end up paying a settlement.

Blumenthal says he can solve most of his other problems quickly. He expects to shave about one-fifth of the inventory by midyear. And he plans to ease the earnings pinch with a 3% cut in Unisys' 93,000 member work force.

IF HE CAN HURDLE these obstacles, Blumenthal could find firmer ground than such smaller rivals as Control Data Corp. He appears to have assured

former Sperry customers that he won't strand them by shifting to Burroughs technology. Unisys also wins praise for using the popular Unix operating system in its new machines, allowing broader computer compatibility. Even with the recent earnings hiccup, analysts agree that Unisys has performed better than its progenitors would have separately. Together, they lost \$43.4 million in the merger year—a far cry from last year's \$681 million net gain.

Blumenthal also firmed up the company's full-service strategy last year with two acquisitions: Timeplex Inc., a networking company, and Convergent Technologies Inc., a maker of office workstations. He's likely to keep on acquiring. But whatever he adds, Blumenthal must get more from it. Says analyst Don Young of Sanford C. Bernstein & Co.: "He's got to go from being the worst asset manager in the industry to being one of the best." In other words, he needs to start being a little more creative in his destruction.

By Joseph Weber in Blue Bell, Pa.

MICHAEL BLUMENTHAL

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OSCAR WYATT

Poor Oscar Wyatt. Less than two months after his Coastal Corp. launched a hostile bid for Texas Eastern Corp., another large gas pipeline company, he's losing out. Panhandle Eastern Corp. smothered his \$42-a-share bid with one worth \$53. If that deal goes through, Wyatt will gross only about \$60 million on his \$73 million stake—after investment banking fees.

That's how it goes with Oscar S. Wyatt Jr.: The money just keeps rolling in. Over the past few years he has made Coastal one of the fastest-growing and most profitable companies in the gas-pipeline business, with interests in gasoline refining and marketing, coal, and trucking. Since 1983, Coastal's return on equity has averaged nearly 15%. With a boost from its six refineries, earnings in 1988 jumped 39%, to \$157 million, on sales of \$8.2 billion. Wyatt is "the sharpest dude in the oil patch," says David N. Fleischer, analyst at Prudential-Bache Securities.

At 64, Wyatt is still running hard. He's racing to get into new markets before the gas surplus disappears—possibly as early as yearend—and buyers start scrambling for supplies. Coastal plans to build new transmission lines from Wyoming to Bakersfield, Calif., and from Mobile Bay to Florida. While the company's high debt-to-capital ratio of 70% keeps a lid on the stock price (which hovers around \$35), it's unlikely to slow Wyatt's growth plans: Coastal has a cash flow of \$600 million this year,



COASTAL'S CHIEF
EXECUTIVE IS A MASTER
OIL PATCH STRATEGIST.

HE HAS MADE HIS
COMPANY AMONG THE
INDUSTRY'S MOST
PROFITABLE. NOW, HE
WANTS TO CAPITALIZE
ON THAT MOMENTUM

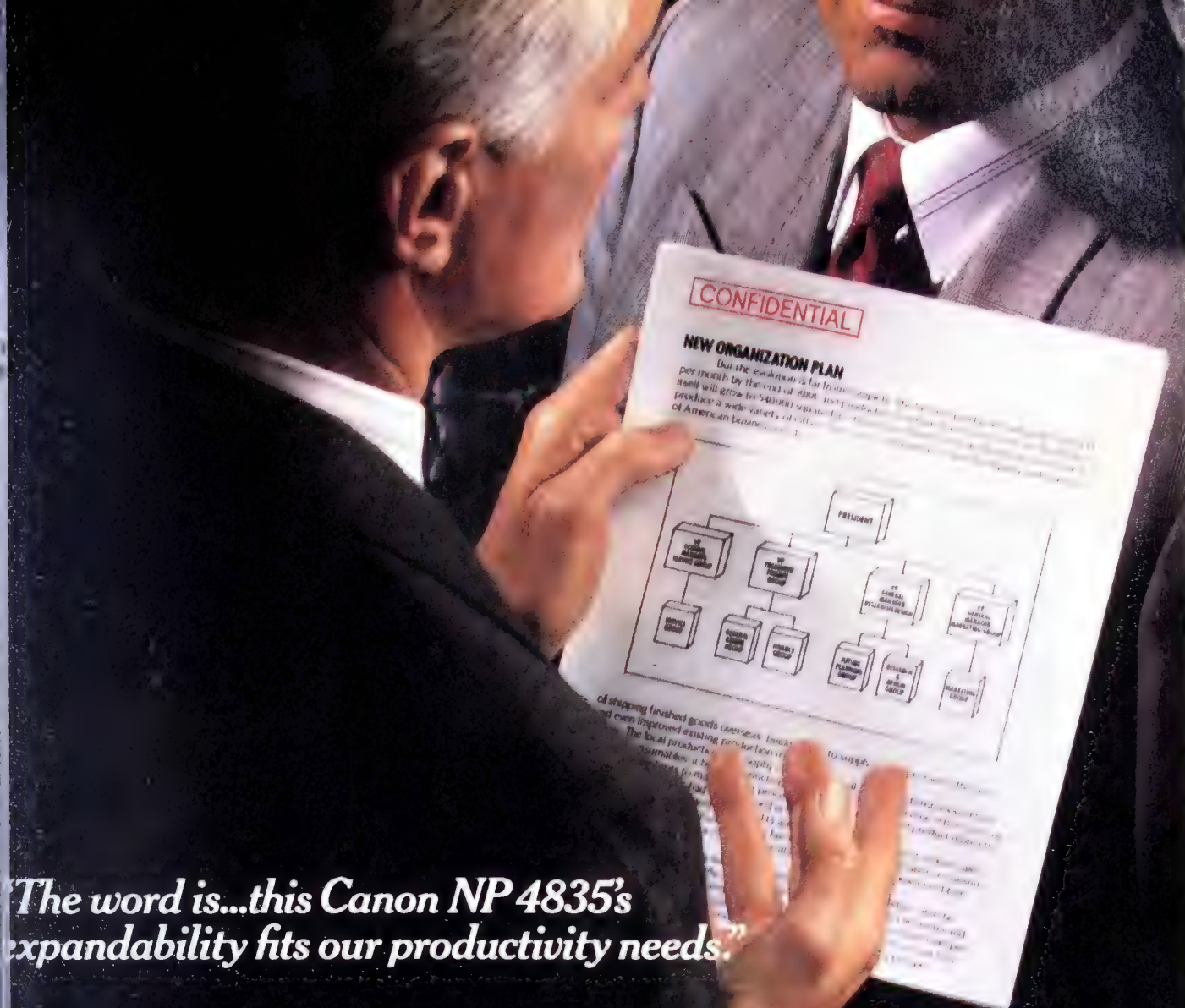
which should cover debt payments. To keep expanding, Wyatt also hopes to sell a 50% interest in his refineries and filling stations. He has been talking to several oil-producing countries, including Nigeria and Oman. That could raise as much as \$800 million.

WYATT'S AGGRESSIVE style has earned him his share of enemies over the years. In the mid-1970s, during a brutal cold spell, he cut off gas supplies to Austin and San Antonio, leaving the cities scrambling to provide heat. Wyatt said he couldn't meet his promises to supply cheap gas when prices started soaring. In 1980 he spun off his Texas intrastate gas company to settle billions of dollars in claims from users. Now, every time he moves to buy another company, his target brings up the gas debacle to paint him as untrustworthy.

With the legal skirmish behind him, he hit the acquisition trail. After three attempts at buying gas companies, he finally won Detroit-based American Natural Resources for \$2.45 billion in 1985. The deal propelled Coastal into the industry big leagues by giving the company major new markets in the Midwest. Texas Eastern would have given Wyatt a valuable foothold in the booming Northeast market. But Wyatt has moved on to other game. Transco Inc. and Tenneco Inc., both of which have pipelines serving the Northeast, are possible targets. And if Wyatt can keep grossing \$60 million on unsuccessful raids, every big pipeline company may be vulnerable.

By Mark Ivey in Houston



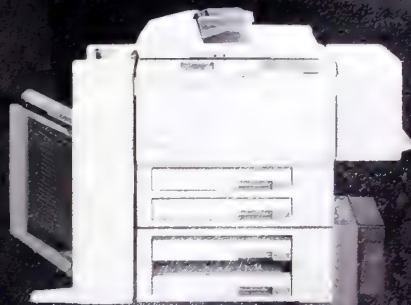


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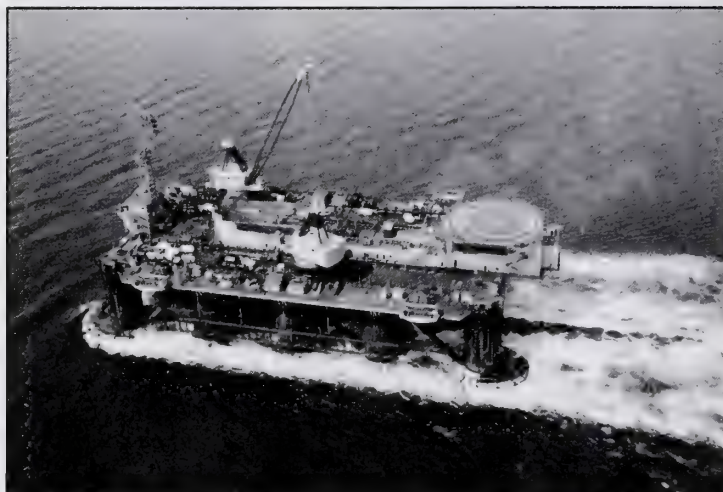


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the markets. ENI Group companies are involved in the energy sector, as well as in the chemical industry, engineering and services, mechanical manufacturing, textile machinery and metallurgy. In some sectors, such as engineering and services and mechanical manufacturing, Group companies are devoting most of their time to international projects.

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Leo Melamed, chairman of the Chicago Mercantile Exchange's executive committee, thought the worst was over. It seemed as if the futures industry finally had stemmed the tide of criticism over its perceived role in the 1987 stock market crash. Then, wham. The Federal Bureau of Investigation revealed in January that it had secretly put four agents to work on the floors of the Merc and the Chicago Board of Trade. Over the course of a two-year undercover investigation, the agents apparently caught dozens of exchange members cheating, manipulating and violating commodity trading rules to cover losses. Suddenly the industry was on the defensive again. Melamed, 57, now must try to regain confidence in the Merc. His first step: setting up a task force to examine a wide range of practices. The task force may suggest eliminating dual trading, in which exchange members trade for their own accounts as well as for customers'. It's also considering ways to improve documentation of trades, and might propose such market surveillance as on-floor cameras. The task force, which Melamed is leading, is expected to report its findings this spring. "If changes are necessary to strengthen the real underlying practices so there's no—or little—scope for wrongdoing, we will make changes," Melamed vows.

Melamed is suited to shake things up: He's direct, often abrasive, but never short of energy. He has also played a starring role in the Merc's development over the years. He founded the exchange's International Money Market in 1972, essentially creating the financial futures industry and making the Merc one of the world's top centers in futures trading. It is now home of Eurodollar and currency futures as well as the most successful S&P 500 index futures contract, the Stan-



STUNG BY A TWO-YEAR
FBI UNDERCOVER
OPERATION, THE
CHICAGO MERC NOW
MUST PUT ITS HOUSE IN
ORDER. BUT MELAMED
CAN'T FORGET
HIS OTHER GREAT
CHALLENGE:
COMPETITION FROM
INNOVATIVE FOREIGN
FINANCIAL EXCHANGES

dard & Poor's 500. Melamed, who also runs a clearing firm called Dellsher Investment Co., previously received only a small stipend for his role at the Merc. But last year the exchange rewarded him with an annual salary of \$500,000.

Melamed's other great challenge is global competition. While the Chicago exchanges continue to dominate worldwide volume in futures, with a 70% market share, exchanges in London and Tokyo are feverishly developing new futures products and distribution systems. To meet the competition head-on, Melamed has been forging domestic and foreign liaisons. Teaming up with Reuters, the Merc is about to offer an off-exchange, computerized trading system. The system, called Globex, is designed to accommodate Merc customers abroad. Now, Melamed has to make sure the Merc's internal problems don't derail those plans.

By Kathleen A. Behof in Chicago



LEO MELAMED

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Chrysler was the best of any American car company. In a recent survey, J.D. Power and Associates, one of the most respected research organizations in the industry, questioned over 25,000 owners of 1987 model passenger cars on product quality and dealer service. The results show that, once again, Chrysler owners had a higher level of satisfaction for their cars than Ford and GM owners had for theirs.

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MICHAEL MILES

Kraft Inc. always used to set aside some time for social activities at its worldwide managers' meetings. But as the company's No. 2 man, Michael A. Miles would have none of that. While his colleagues headed out to the golf course or the tennis courts, recalls a former executive, Miles invariably went to his room to read a book, nap, or work.

Those private moments will be much harder to come by this year. Miles, 49, now must mesh Glenview, (Ill.)-based Kraft, which Philip Morris Cos. bought for \$12.5 billion in December, with PM's giant General Foods Inc. Combined 1988 sales of the two heavyweights hit \$22.5 billion. Put another way, they captured 10¢ of every U.S. dollar spent on packaged foods.

The new president and chief operating officer of Philip Morris' food empire first has to get a handle on his domain: It includes 101,000 employees, 200 plants, 70 distribution centers, and a \$200 million research and development program. Pinpointing where to make cuts and what to invest in should keep him plenty busy. But Miles must also turn his immediate attention to a number of hot spots.

Tops on the list of problem products are Post cereals, Kraft salad dressings, and especially Maxwell House coffee, which lost money last year when it was not under the General Foods USA banner. Miles also isn't satisfied with the margins realized by Kraft's institutional food-



MELDING KRAFT AND
GENERAL FOODS—PHILIP
MORRIS' TWO HUGE
FOOD SUBSIDIARIES—
AND REVVING UP
LAGGING BRANDS WILL
REQUIRE SOME REAL
MARKETING MAGIC
FROM THE NEW BOSS

service business. And fierce competition assures a constant stream of new challenges. In the hotly contested mayonnaise market, for example, CPC International Inc. recently stole a march on Kraft with its new cholesterol-free mayo under the Best Foods and Hellmann's labels.

AT LEAST Miles has some experience with troubled brands. First as senior marketing vice-president of Heublein Inc., then as chairman, Miles revived the company's Kentucky Fried Chicken chain. Later, at Kraft, the former ad-man's canny marketing put muscle back into sales of such products as cheese and mayonnaise. Capitalizing on the trend toward more healthy foods, he has introduced low-cholesterol and

low-fat versions of many products, including Par-kay margarine. He also championed new products—350 between 1986 and 1988. Marketing muscle meets new-product expertise in his latest professional passion: brand cross-fertilization. For example, Miles is teaming Kraft's ice-cream brand and its jelly-making experience to launch a line of Breyer's premium fruit preserves.

Now Philip Morris is counting on him to kick-start its plodding General Foods USA unit, where 1989 sales are predicted to rise only half as much as Kraft's. To keep him from leaving for a competitor, PM has assured Miles he will succeed John M. Richman as CEO of the combined operations next year. By then, spending quiet time in his hotel room should be a distant memory.

By Lois Therrien in Chicago





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You'd think Boeing Chairman Frank A. Shrontz would be on easy street. A \$54 billion order backlog will keep Boeing plants humming into the mid-1990s and send its earnings up. Yet the giant plane-maker suffers from an embarrassment of riches. Customers are turning over production delays on the new 747-400 jets they've ordered. And in the clamor over air safety, Boeing Co. has come under intense scrutiny from regulators and the traveling public. Shrontz' biggest challenge is ensuring that the No. 1 planemaker keeps its reputation for quality and safety.

The pressures on the composed and urbane Shrontz, 57, come just as earnings are taking off. Thanks to a five-



BOEING CAN'T KEEP UP
WITH DEMAND.
SO ITS BOSS MUST
BOOST PRODUCTION
AND PROTECT
ITS REPUTATION FOR
QUALITY—AS
QUESTIONS MOUNT
OVER THE SAFETY OF
OLDER PLANES

year buying binge by airlines, the Seattle company's profits are expected to jump 50% this year, to \$918 million, on a 29% gain in revenue, to \$22 billion. Profits next year should rise 25%, and revenues 7%. "We have plenty of business," says Shrontz, a 30-year Boeing veteran. "Our big job is to execute."

BIG JOB IS RIGHT. Shrontz will have his hands full getting 747 production back on schedule. Because the company is overcommitted, it's running several months behind in delivering the jumbo jets—Boeing's first missed deliveries in 20 years. The company's top brass is busy negotiating concessions with irate airlines.

Employees are none too happy, either. Boeing has increased its work force 83% in the past five years, to 155,000, but it's still so short of manpower that it took the unusual step in early March of "borrowing" 760 Lockheed Corp. workers for its 747 production line. When labor negotiations start this fall, Boeing's unions will grouse most about excessive overtime.

As production pressures increase, Shrontz will have to be more vigilant about safety and quality. Boeing's image has slipped because of miswirings and plumbing problems on 59 of its jets and several crashes involving its planes. Although investigators may exonerate Boeing, the Federal Aviation Administration has stepped up its oversight of production and quality control.

Shrontz' problems on the military side are more commonplace: Business is just too slow. And while the former Assistant Defense Secretary would love to restore profitability to Boeing's military transport business, which last year lost an estimated \$60 million, shrinking defense budgets may block his way. Defense and space will probably drop to 22% of Boeing's sales by 1991, from 29% last year. In the face of numbers like that, Boeing's backlog doesn't look so bad after all.

By Maria Shao in Seattle

FRANK SHRONTZ



TO HELP PULL CBS
OUT OF THE
PRIME-TIME CELLAR,
HE'S GIVING HIS
CREATIVE
PEOPLE FREER REIN.
BUT HE SAYS THE
'TIFFANY NETWORK'
WON'T
DESCEND TO TRASH TV

Howard Stringer, president of CBS/Broadcast Group, is walking a tightrope. He's supposed to pull CBS out of the four-year decline that sent it into third place in the prime-time ratings race—arguably the most difficult job in television. And he's working without a net: Since CEO Laurence A. Tisch sold the company's music and publishing operations, CBS Inc. draws virtually all of its \$2.8 billion in revenues from the network and the five stations that it owns and operates under Stringer's supervision.

As Stringer sees it, the network's biggest problem has been morale. After years of management upheaval, restructuring, and firings, its creative people are afraid to put their necks on the line. So Stringer promises to stick with new ideas longer than his predecessors did.

Although he has no background in entertainment, the 47-year-old Stringer

has the credentials to lead a campaign designed to turn the network around. He became a master of Black Rock's often brutal politics in his 23 years at CBS News, the division he headed until his promotion six months ago. And he's a true believer of the company line about quality programming. "The audience isn't stupid," he says. "If the public relates a network to satanism, sex, and rock 'n' roll, then the whole network suffers. This little box is a member of the family."

THE BELEAGUERED network head knows that he can't afford to sound too pious, though: Many Hollywood producers and stars still recall CBS' arrogance from the days when the "Tiffany network" dominated the market. Several top producers decided to take their programs elsewhere.

Now, Stringer desperately needs the creative people to provide him with new hits. CBS' top shows—such as *Newhart* and *Falcon Crest*—are old and fading. Most of the network's new

programs this season were dead on arrival, including sitcoms from Dick Van Dyke and Mary Tyler Moore. Stringer recently suffered a setback in news when *60 Minutes* correspondent Diane Sawyer jumped to ABC.

But there are hopeful signs. The smash miniseries *Lonesome Dove* showed that CBS can still draw huge audiences. The network also has had some success reinvigorating the ratings of some older soap operas in prime time, such as *Dallas* and *Knots Landing*. And, much to the skeptics' surprise, CBS' new *Pat Sajak Show* is drawing respectable ratings against NBC's mighty Johnny Carson.

Stringer has helped his cause by charming the rich and famous of Hollywood. After several meetings with Angela Lansbury, he persuaded the actress to stay for at least one more year in CBS' only top-10 entertainment show, *Murder, She Wrote*. It was a minor coup. But now Stringer needs to find more shows that are worth saving.

By David Lieberman in New York

HOWARD STRINGER

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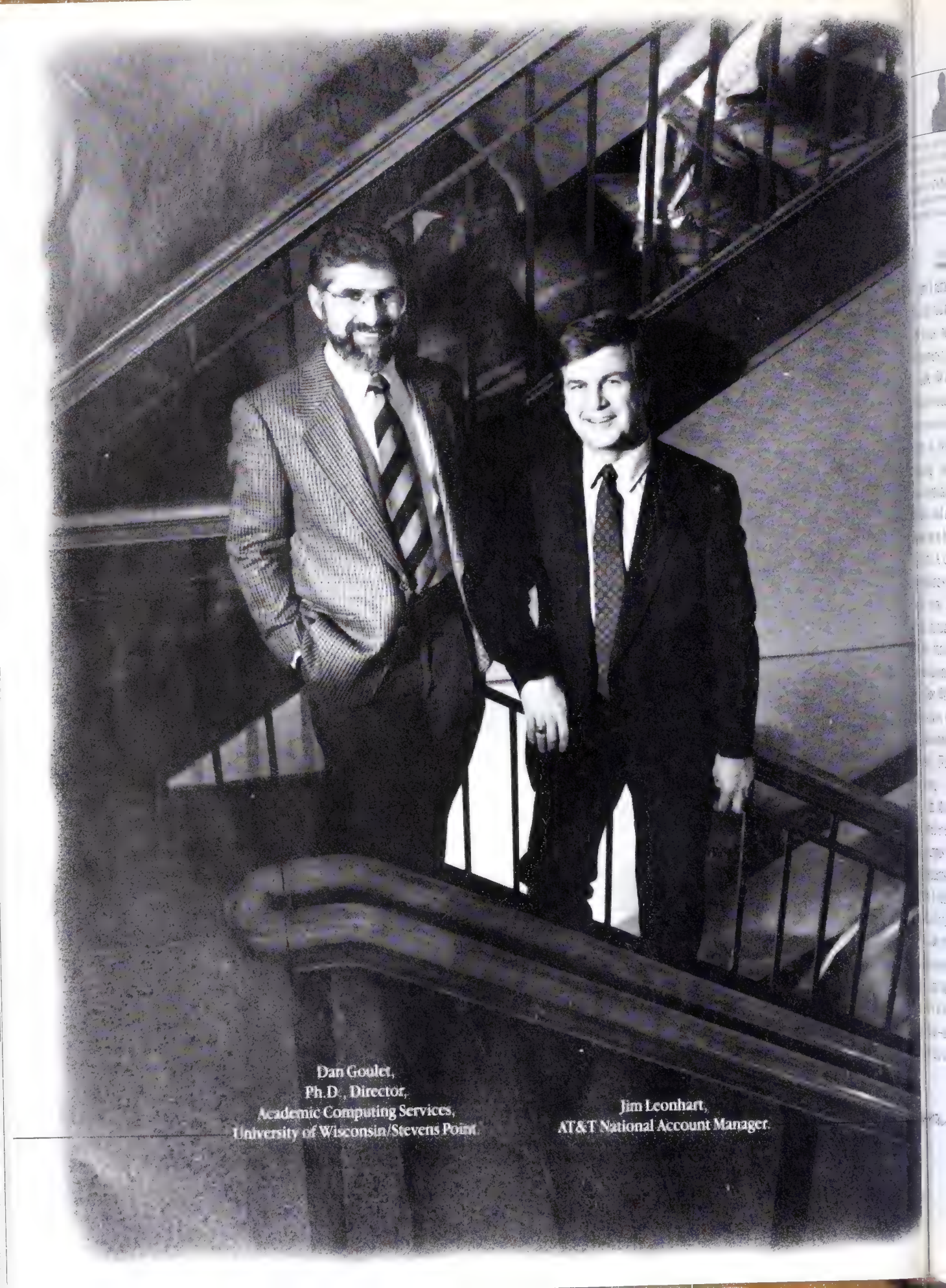
South Carolina offers an abundance of new incentives to help your business take off. Examples: A five-year exemption from county ordinary property taxes for new or expanded facilities with investments of \$50,000 or more. And the option to negotiate with counties a fee in lieu of property taxes for investments over \$85 million. Michelin and Union Camp are two major companies that recently have taken advantage of these new incentives. South Carolina also will train

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South Carolina



Dan Goulet,
Ph.D., Director,
Academic Computing Services,
University of Wisconsin/Stevens Point.

Jim Leonhart,
AT&T National Account Manager.



ally, an information management revolution
red at the University of Wisconsin-Stevens
Dan Goulet from the University and Jim
part of AT&T—campus radicals of a different
—explain how they were able to realize a bold
complex vision.

FEBRUARY 22, 1989

Jim: I remember the first day we
You had been around the block a
times, but weren't getting
answers you needed.

Dan: We wanted to create a
que educa-
environ-
it: a free-
ing on-
computer campus. We had a
on, and we were looking for
eone to help build it.

Jim: A distributed networked
puting solution, that's what we'd
it now: a way to process, move
manage information effec-
ly, throughout a widespread
nization.

Dan: We talked to many comput-
endors before you. We got tired
escribing what we needed, so we
v it. That graphic was about 13
long.

Jim: More like twenty. The chart
ved every information resource
ampus linked together, accessible
tudents, faculty, and administra-
. It became the wallpaper in my
e for fifteen months.

Dan: It was like a blueprint for a
i superhighway.

Jim: We put our ISN wide-area net-
k at the center—like an inter-
nge—and built fiber and twisted-
data lanes to applications running

on AT&T 3B2s, DEC, UNISYS and
other hosts located in all the depart-
ments. We put on- and off-ramps in
strategic locations: StarLAN networks
that gave access to the highway from
workstations.

Dan: We designed everything
from the user perspective. The more
technically remarkable the system
became, the harder we worked to
make it approachable.

These men started a revolution on campus.

Jim: Easy for novices, powerful
enough for programming students.

Dan: We developed a menu-
driven user interface that is consistent
and clear. Students and faculty can
select applications like checking spell-
ing, transmitting course grades, even
browsing through the on-line card cat-
alog of 1.5 million books at the Univer-
sity of Wisconsin-Madison. We wanted
desktop power and access, but we
wanted to process information where
it made the most sense.

Jim: Thinking back, we realized
early that the complexity of your
vision precluded a single-system
focus. You needed open systems.

Dan: You were really the only
ones that understood this point. Open
systems allow us to use off-the-shelf
components; vendors have to bid
against each other to get our business.
Open systems are the secret.

Jim: It's mind-boggling how much
computer power is out there. We
wanted to harness it all, yet give a
piece to every individual.

Dan: A truly distributed network,
one we don't think we'll ever outgrow.
We've added 300 WGS workstations
in the last five months.

Jim: Dan, where in the world is
that wallpaper today?

Dan: We had it bronzed. Today,
so many colleges and businesses
really need a similar solution.
That's probably why we've had
so many visits from
them lately.

Jim: Little
did we know
back then, when we first met.

Dan: Oh, something tells
me you had a hint.

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The right choice.

H

enry Ford II once proclaimed that there were "no princes" at the company that bore his name. But he never said anything about the men who would be kings. His son, Edsel B. Ford II, has emerged as a clear pre-

tender to the throne—in this case, to Donald E. Petersen's job as chairman.

In early January, nearly a year after Edsel, 40, and his younger cousin, William C. Ford Jr., joined the auto maker's board, Edsel went public with a dispute between himself and Petersen. Because the Ford family held 40% of the voting stock, it deserved to be heard more, he argued. For his part, Petersen is convinced that the company's prosperity is due to the professional management that Henry Ford II installed. These positions are just for openers. There will be a "continuing dialogue" with Petersen, says Edsel.

Edsel is general sales manager of Ford's Lincoln-Mercury Div.—six rungs below the top spot. By 1990 he will join one of the board committees, where the real decision-making rests.

Further power, though, will depend on moving up the executive ranks. So far, he has been on the fast track through a range of jobs. Still, Ford employees and investors are watching to see if Edsel's next promotion is earned—or simply conferred.

He knows only one way to prove himself: work. "I know I can't succeed without putting in as much if not more time than the next guy," he says. His day often runs 11 hours.

THAT ALONE MAY NOT be enough, partly because the record he forges is not entirely within his control. Ford's sales have been limited by capacity for several years, and production resources are rationed. If Lincoln-Mercury wants to make—and sell—more cars, the Ford Div. will have to settle for making—and selling—fewer. That



WITH HIS NAME ON
THE BUILDING AT FORD
MOTOR, H. F. II'S SON
IS ON A FAST TRACK.
BUT AT ODDS WITH
FORD'S MANAGERS
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CHALLENGES IN HIS JOB,
HE'S NO SHOO-IN TO
SUCCEED TO THE
EXECUTIVE SUITE

hasn't happened. While Ford Div.'s share of the U. S. car market rose 23% over the last two years, Lincoln-Mercury Div.'s share climbed only 8%.

Yet Edsel can't grab more corporate clout for his division unless demand picks up, and the division's marketing has sputtered. Bowing to its dealers, Lincoln-Mercury dropped the "Where Comfort and Control are One" ad campaign in February, a scant three months after it was launched. In its place, it resurrected the prowling cougar. The Cat, the division's third national ad campaign in less than a year, hadn't been used nationally since 1979.

In his eulogy at his father's funeral in 1987, Edsel said, "We who are left have inherited the responsibility to carry on... It is a responsibility of love and destiny." Edsel's performance at Lincoln-Mercury will determine whether it indeed is his destiny.

By James B. Treece in Dearborn, Mich.



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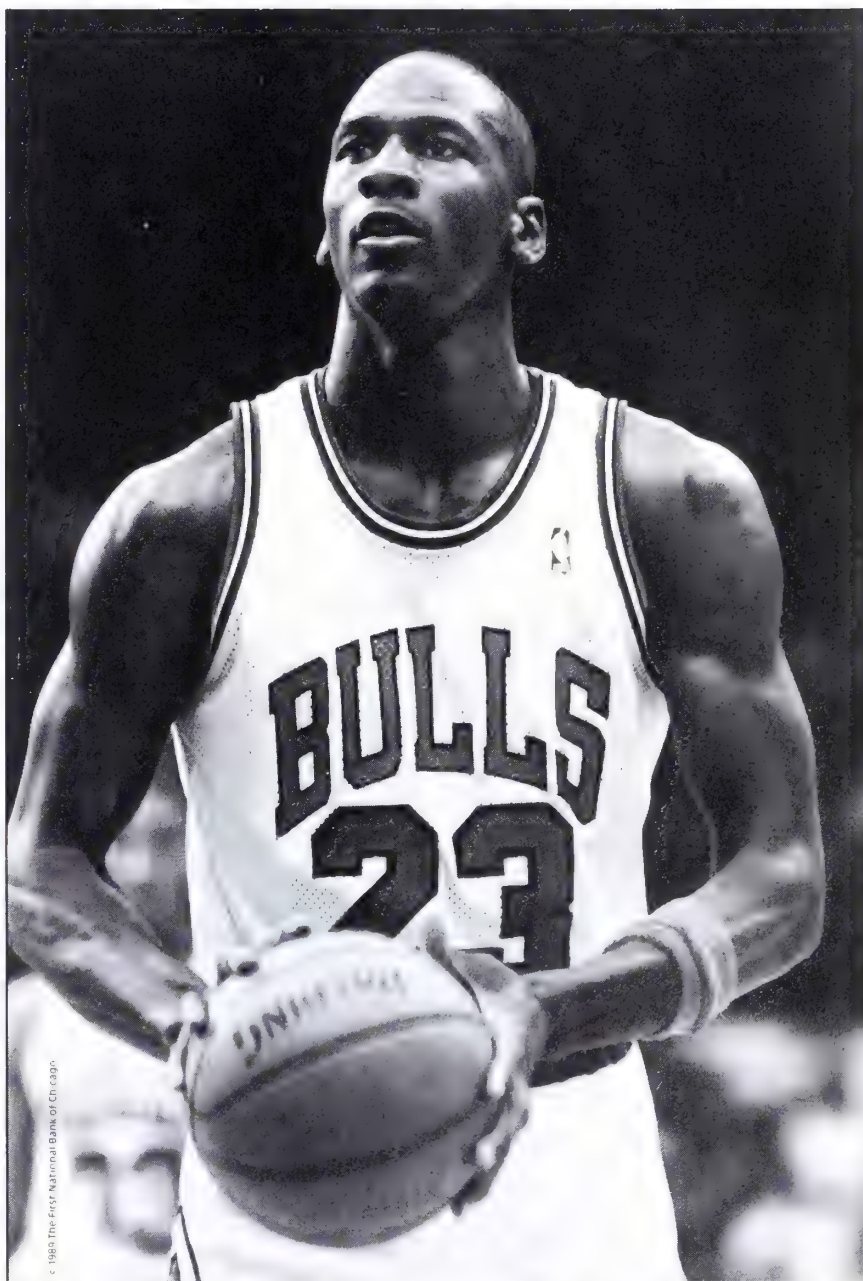
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FIRST CHICAGO

CHARLES CORRY

A

s behind-the-scenes adviser to USX Chairman David M. Roderick for a decade, Charles A. Corry helped transform the once-shaky steel company into a \$17 billion giant with a huge stake in energy. He and Roderick sold billions in underperforming assets, slashed employee rolls, and cut steel capacity by 46%. As a result, last year's profits soared nearly fourfold, to \$756 million. Now, with the company on much better footing and Roderick set to retire in May, Corry, 57, finally gets to step into the spotlight and run USX Corp. himself. Sound like the ideal job? Not exactly.

To establish the former U.S. Steel Corp. in the energy business, Roderick piled on debt and used new stock to make \$10 billion worth of acquisitions in seven years. As a result, the company's long-term debt-to-capital ratio is 45%. "We have too much debt" for a company dependent on "two high-risk, volatile, capital-intensive businesses," Corry concedes. Over the next two years he plans to use asset sales and USX's lush cash flow to slash debt by 31%, to \$4.3 billion. Corry says he will also spend billions to build the energy unit and modernize steel mills. And he may spin off 19% of his steel business, which should boost USX's stock price.

That might help Corry solve another of his problems. USX stock trades around 31, well below the company's estimated breakup value of as much as \$50 a share. Un-



HE WANTS TO PAY OFF
SEVERAL BILLION
DOLLARS OF USX DEBT
OVER THE NEXT TWO
YEARS. BUT TO AVOID
ATTACKS FROM
RAIDERS HE MUST ALSO
KEEP THE STOCK PRICE
FROM FALLING

til Corry closes that gap he will have to worry about takeover attempts.

The biggest threat comes from raider Carl C. Icahn, who has owned 11% of USX since 1986. Roderick has constructed a relationship of a sort with Icahn, occasionally dining with him in New York. Corry has yet to develop a similar rapport. But he professes not to be worried about a takeover attempt—by anyone. "My job is to manage assets intelligently," he says. "You can't fret about what a bunch of outsiders may do."

Corry himself is the quintessential insider. From the University of Cincinnati law school he went directly to U.S. Steel, working 30 years mainly in finance and accounting. Though short on charisma, he earned respect for making tough decisions and clever acquisitions. In 1982, as Roderick's top strategic planner, he won praise for outfoxing Mobil Oil Corp. to snare Marathon Oil Co. for \$6 billion. His reward came last year when he was named USX's president.

ANALYSTS EXPECT profits this year to rise 19%, to more than \$900 million, thanks to a strong steel market and recovering energy prices. But over the long term, profits aren't guaranteed. Should a recession hit the steel business, Corry will have just his energy units—now only modestly profitable—to pick up the slack. Some analysts suspect he may want to buy a third major business. Corry says that's unlikely. His top priority, after all, is reducing debt—not adding it.

By Gregory L. Miles in Pittsburgh



How I keep my clients and myself from doing time.

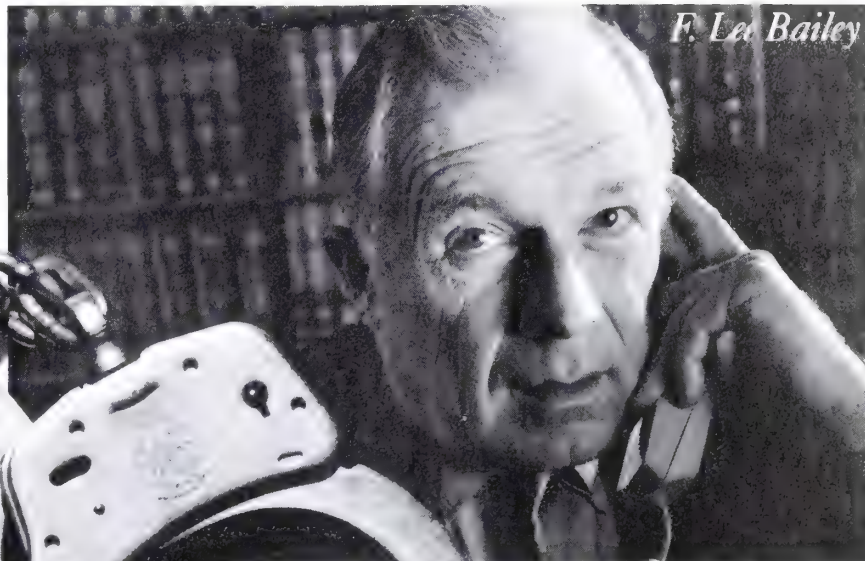
A lot of people ask me where I find time for everything I'm involved with. And my answer is always the same: I don't find time, I make it.

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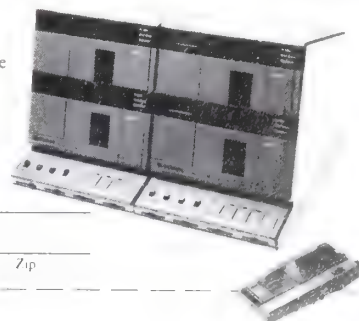
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T

he man has two strikes against him. D. Joseph Corr, the latest CEO at Continental Airlines Inc., is assuming the top spot of a struggling company caught in the crossfire of a labor war. And he's working under the fierce gaze of Texas

Air Corp. Chairman Frank Lorenzo, who will never be mistaken for America's best-loved boss.

Corr, 47, is feeling the strain. Since taking the CEO job in December, he has worked nearly nonstop to pull Continental out of its nosedive. Says one insider with a gift for understatement: "Things are in urgent need of improvement." In two years the carrier has lost \$574 million. And analysts expect the company to lose \$50 million more in this year's first quarter.

Corr is stepping into this morass with only three years of airline experience. Carl C. Icahn brought him over from ACF Industries, a St. Louis-based leasing firm, and installed him as president of Trans World Airlines Inc. when that carrier was foundering. Corr rapidly cut costs and boosted operating profit sharply. But hovering over him now is Lorenzo, who has hired five new Continental CEOs in five years.

LORENZO'S CLOUD hangs over Corr in another way: The unions striking Eastern are expanding their crusade to its sister carrier, Continental. With leaflets and pickets, they're warning fliers against trusting their lives and dollars to a Lorenzo company. That campaign spells big trouble for Corr. Continental is already suffering from too many bargain-hungry vacationers and too few full-fare business travelers. Although its costs fall about 18% below the industry average, Continental's rock-bottom pricing has squandered the advantage. The result: Continental lost \$315.5 million last year.

Corr and his managers are trying to shed the carrier's no-frills image.



CONTINENTAL'S NEW

CEO IS TRYING

TO SHED HIS CARRIER'S

NO-FRILLS IMAGE

AND ATTRACT MORE

BUSINESS FLIERS.

BUT WILL HE GET

ENOUGH TIME

AND MONEY FROM BOSS

FRANK LORENZO

TO PULL OFF

A TURNAROUND?

They've formed an alliance with Sweden's Scandinavian Airlines System to establish a training institute, which will move among hub airports. And the airline has revamped its marketing program to target the business flier. Discount passengers currently fill fewer seats than before and margins are up. Management says the carrier may break even by June.

But Corr has to act fast while he still has cash. Continental has sucked about \$555 million in cash from Texas Air to fund operations since January, 1987. Eastern Air Lines Inc.'s bankruptcy and a rising debt load are certain to shut off that spigot. Corr's estimated \$140 million cash supply leaves little room for error. To pull off a turnaround, Corr will need time, money, and operating room. But at Lorenzo's Continental, those commodities seem to be in short supply.

By Todd Vogel in Houston



JOSEPH CORR

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ON ALLTEL.



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Revenues and Sales \$1.1 billion
Reported

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Earnings Per Share \$2.91
*From Operations**

Net Income \$134 million
Earnings Per Share \$3.13
Dividend Rate \$1.72
Average Common

Shares Outstanding . . 42.3 million

**Excludes One-Time Acquisition
Ticker Symbol: ALLT on the New York
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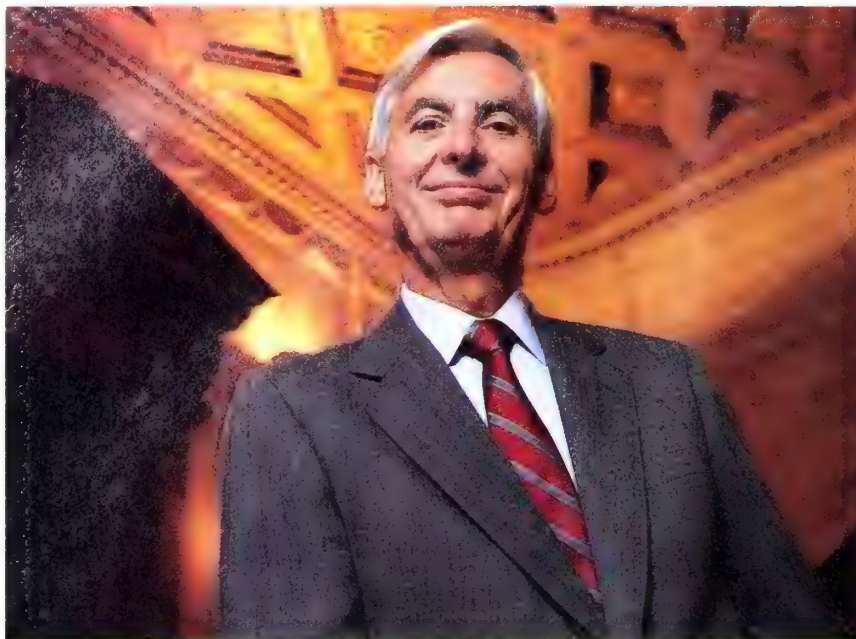
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DU PONT'S NEW
CHAIRMAN IS SOFT-
SPOKEN BUT TOUGH.
HIS FIRST PRIORITY IS
TO CHARGE UP A GROUP
OF NEW HIGH-TECH
OPERATIONS, WHERE HE
BELIEVES FUTURE
CORPORATE GROWTH
WILL COME FROM

With his warm demeanor and soft accent, Edgar S. Woolard Jr. comes across as the quintessential gracious Southerner. But under those velvet gloves, the incoming chairman of Du Pont Co. is said to have iron fists. While running Du Pont's fibers business—which he helped transform into the company's most lucrative segment in the late 1970s—Woolard slashed 20% of the staff. He also helped slam the door on national unions at Du Pont.

Now Woolard, 55, has an even tougher challenge. In taking over as chairman in April he inherits a \$33 billion-a-year behemoth that has spent the past decade trying to kick itself into higher gear. Nervous about the slow growth of its major businesses—chemicals, oil, and fibers—Du Pont has bought its way into high-growth areas like biomedical products, electronics, and agricultural pesticides. But the

new areas themselves could use a kick. Shareholders have soured on Du Pont, keeping its stock in the 80s most of last year after a precrash high near 120. Only since Du Pont announced a \$2 billion repurchase plan in January has the stock moved to near 100.

THE PROBLEM IS that Du Pont still derives about 70% of its profits from fibers, polymers, and chemicals, which promise only 4% to 8% annual growth over the next five years. Woolard must get his new businesses up to speed and shift the balance so that a greater percentage of revenues come from the new areas. The core segments are “still important, for short-term growth,” Woolard says, but he’s counting on the new areas to deliver annual growth of 10% to 12% through 1994.

That seems unlikely with the biomedical units. Since 1982, Du Pont has poured more than \$1.7 billion into the businesses—and they’re losing money. Analysts say Woolard should sell them or make an acquisition to put Du Pont

in the big leagues of biomedicine. Woolard says it’s too early to discuss either possibility. For now, he says he will press for quicker drug development and licensing arrangements.

Other areas look more promising. The agricultural chemicals business has already taken off, and the electronics business is showing new strength. Woolard’s priority for the two is to expand overseas sales, which he also hopes to do for core businesses. As for oil, he will have to wait out a slump that may go on for several years.

Du Pont and its new chairman go back a long way. After graduating with a degree in industrial engineering from North Carolina State University, Woolard signed on with Du Pont in 1957. As an engineer from a state school, he represents a break with Du Pont’s tradition of elevating scientists from high-prestige universities. But the company can always hire more scientists. What it needs is a tough manager who can rouse it to action.

By Joseph Weber in Wilmington, Del.

EDGAR WOOLARD

NO EXCUSES NOTHING BUT PERFORMANCE.SM

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TED TURNER

Ted Turner compares himself to Indiana Jones. Like the swashbuckling movie hero, he fancies himself an expert at wriggling out of the most harrowing predicaments. But when Turner paid \$1.5 billion for MGM's movie library in 1986, some thought the cable-TV entrepreneur had permanently entered the Temple of Doom. The deal saddled his Turner Broadcasting System Inc. with a mountain of debt—and Turner nearly lost control of his empire. "I was crazy," he conceded in an interview last year.

But there is method to Turner's madness. After teetering on the brink of financial disaster just two years ago, TBS is beginning to turn around. Helped by Turner's much-criticized purchase of MGM's library, his new Turner Network Television (TNT) channel is off to a roaring start.

Turner, 50, is also shoring up his weak financial foundations with a little help from his friends. Led by Tele-Communications Inc. and Time Inc., a consortium of cable operators in 1987 ponied up more than \$560 million to help refinance his most costly MGM debt.

TURNER'S BOARD is more pragmatic now that it includes some of his cable customers, and late last year he won \$250 million of bank credit, a cushion for principal payments due this year. And the expected sale of his downtown Atlanta headquarters could net TBS \$70 million.

Losses are narrowing, thanks mostly to higher ad revenues at his popu-



HIS LOSSES ARE DOWN,
AND HE NOW HAS A
COVETED LIBRARY OF
3,300 MOVIES. BUT TO
STAY AFLOAT IN THE
CROWDED CABLE-TV
FIELD, TURNER
BROADCASTING MUST
FIND NEW CUSTOMERS

lar Cable News Network (CNN) and Atlanta Superstation TBS. Last year the company reported losses of \$94.7 million, compared with a \$131.2 million loss in 1987. Turner also saw revenues from syndication and licensing of MGM movies increase 25%, to \$200 million. Investors, betting the company will turn profitable by 1990, have more than doubled its stock to \$26 in the last year. "The numbers are better than anybody thought," says Prudential Bache analyst Richard Bilotti.

Yet Turner still has his share of problems. Even with a captive library of some 3,300 movies, he must devise fresh shows to entice new cable customers, an area where growth has slowed. Higher than expected ratings for TNT let the company increase its

budget for original programming, and it will produce 25% more new shows and movies this year. But some advertisers see little ratings gains for Turner's Superstation and CNN operations. And cable channel proliferation could slow the growth of ad revenues as companies make the simpler buy of broadcast TV. "It's getting to the point where there are just too many cable networks," says Bill Wiener, senior vice-president of new technologies at BBDO Worldwide Inc.

Another concern is the loss of Turner. Time Inc. already sees its 13% stake in TBS as the first step in eventually acquiring the company. Turner, who controls 43%, says he's having too much fun to quit. But, he warns, anything could happen. With Ted Turner, that goes without saying.

By Scott Ticer in Atlanta



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the guys.
So I guess it is working."

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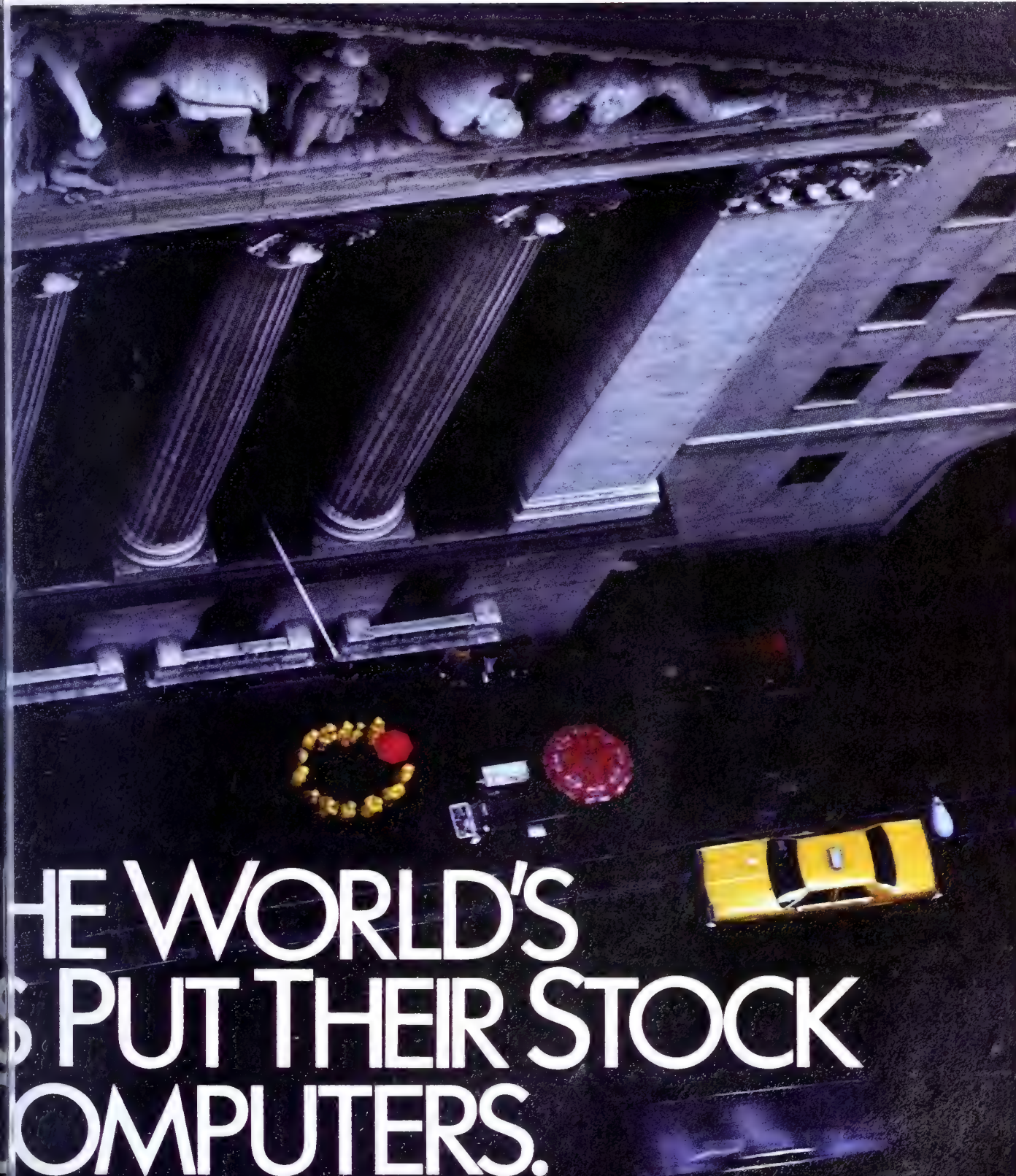
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An aerial, high-angle photograph of a classical building with large columns and a pediment. A yellow taxi is visible on the street in front of the building. The image is dark and grainy, with a high-contrast, almost black and white aesthetic. The text 'THE WORLD'S PUT THEIR STOCK COMPUTERS.' is overlaid in large, white, sans-serif capital letters at the bottom left.

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TELECOMMUNICATIONS INFORMATION SYSTEMS COMPUTERS SOFTWARE MOBILE COMMUNICATIONS PUBLISHING

Jim P. Manzi had two reasons to be cheerful at the start of last year: Lotus Development Corp., his \$469 million-a-year software company, was on a growth spurt. And his \$26 million in salary and stock options made him one of the nation's highest-paid chief executive officers.

Then the balloon burst. Manzi accepted the resignation of his second-in-command, the first of many executives who would leave by yearend. A new version of 1-2-3, the personal computer spreadsheet program that accounts for two-thirds of Lotus' revenues, was delayed—then delayed again. Other important new products never appeared. Profits, though still fat at \$59 million, dropped for the first time. Employees began to whisper that Manzi, a 37-year-old former McKinsey & Co. consultant, was on his way out.

It was a stunner for one of the computer industry's most spectacular success stories. But Manzi, hired six years ago as director of marketing by Lotus founder Mitchell D. Kapor, insists he's not going anywhere. The company's directors concur. In fact, after a trying year, the Cambridge (Mass.) company appears to be back in the groove.

THE NEW 1-2-3 remains the big question. Lotus announced it had delivered the program to a few test customers in late February, making it likely that the company would meet its promise of shipping by June. It's not clear, though, how many customers need the extra performance that the upgrade provides. Many will stick with earlier versions. At the same time, rival spreadsheets from Microsoft Corp. and Borland International Inc. are eating into Lotus' 55% market share.

On the bright side, many 1-2-3 users have invested millions in training and are not about to switch. In addition, Manzi's marketing and sales force is second to none in PC software.



LAST YEAR WAS A BIG
COMEDOWN FOR LOTUS'
CHIEF: PRODUCTS
WERE DELAYED, PROFITS
DIPPED, AND KEY
EXECUTIVES WALKED.
BUT NOW HE'S GETTING
BACK IN THE GROOVE,
WITH A NEW VERSION OF
1-2-3 FINALLY IN
TEST—AND A GENTLER
MANAGEMENT STYLE

Now, Lotus says it will ship no fewer than nine new products by the end of the year. Some analysts doubt that the company can meet that date. But new programs such as Agenda, an organizational tool, and Magellan, which indexes and retrieves information on hard disks, show there's still creativity left at Lotus.

The most difficult challenge ahead may lie under Manzi's nose. Many Lotus employees resent his brooding, abrasive style. In addition, the rumors following last year's executive exodus hurt morale. Manzi, however, recognizes the problem. After clearing away the personnel "underbrush," as he says, he's happy with his management team. But, Manzi concedes, "I need to be more sensitive." That, and a successful new spreadsheet program, may be enough to pull Lotus out of the hole he helped to dig.

By Keith H. Hammonds in Cambridge



JIM MANZI



Hugh L. McColl, chairman of NCNB Corp., was vacationing in South Carolina last summer when he decided to swing by his bank's new loan office on Pawleys Island. But when he arrived, he was shocked to find that the office had no sign outside. Told that one was "on order," McColl headed for a hardware store, and minutes later he returned with a handmade sign.

McColl, 53, displayed that same take-charge attitude on a far grander scale last July. Thanks to some shrewd last-minute tax maneuvers, he managed to beat out Wells Fargo, Citicorp, and an investors' group led by former Senator John G. Tower for the rights to Dallas-based FirstRepublic Bank Corp. And in



BUYING FIRST-
REPUBLIC FITS IN WITH
HIS NATIONAL
AMBITIONS. BUT
SKEPTICS WONDER IF
NCNB SHOULD TAKE ON
A TROUBLED TEXAS
BANK WITH
COMPETITION TOUGHER
AT HOME

late March, McColl launched an unsolicited bid for Atlanta-based Citizens & Southern Corp., while also mulling an offer for parts of another Texas bailout, MCorp. McColl's high-stakes gambits could nearly triple NCNB's assets under management, to \$77 billion, and make his Charlotte (N. C.) bank one of the nation's largest. Says John J. Mason, an analyst with Interstate/Johnson Lane: "McColl has stepped into the big leagues."

Yet McColl won't pocket big-league profits unless he can navigate the volatile Texas market. He received a carpetbagger's welcome when his efforts to consolidate FirstRepublic's branches prompted a \$1 billion run on deposits. And despite its eagerness, NCNB could face a tough road in writing new loans in the shell-shocked oil patch.

ONE INDICATION of McColl's feelings about doing business there: His code name for the bailout was "Calcutta," a sly reference to the "black hole" of lending that has punished many bankers. "People are cautious about going into debt in Texas," says McColl. "But we intend to be active bankers and find the opportunities."

While the government's generous bailout plan shelters NCNB from early financial risks, McColl acknowledges he faces some king-size hurdles in integrating and running FirstRepublic's 41 subsidiary banks. Skeptics question whether NCNB has the depth to manage a troubled bank, particularly when the slowing Southeast economy should heighten competition back home.

If he can make the acquisition work, NCNB's earnings could nearly double in three years—and still leave the bank with a \$1.7 billion war chest to fund McColl's ambition to build a coast-to-coast bank. "We're trying to position ourselves to be one of the survivors when the shooting stops," McColl says. But first he must prove that taking Texas wasn't one bridge too far.

By Dean Foust in Charlotte, N. C.

HUGH McCOLL



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HENRY WENDT

Talk about bad timing. In early February, with earnings sliding fast, takeover rumors rumbling furiously, and the sudden resignation of his president only nine days earlier, Henry Wendt had an appointment that would make most executives' skin crawl: his company's biennial Q&A with 300 investment analysts. But the chief executive of SmithKline Beckman Corp. refused to cancel the session. Smiling broadly and appearing confident, he attended the half-day conference and personally fielded questions for more than an hour.

Yet polish alone won't unknot the problems at his \$4.8 billion-a-year pharmaceuticals giant. Ever since its ulcer fighter Tagamet started giving up market share to rivals and its \$200 million blood-pressure drug Dyazide began losing sales to generics, its Achilles' heel has been exposed: no top drugs to fall back on and no big new products in sight for two years at best.

NOW WENDT, 55, may find himself in an even tighter spot. Early in April, SmithKline announced that it was discussing a merger with Beecham Group PLC, a big British drug concern. While analysts agree that such a deal could create a stronger company, by holding the merger discussions Wendt risked putting SmithKline into play. Among the possible bidders: Sandoz Pharmaceuticals Corp., Hoffman-LaRoche & Co., and DuPont Co. as a white knight. And even if Beecham manages to acquire



TAGAMET AND DYAZIDE
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HOSTILE TAKEOVER

the company, Wendt's future role at SmithKline is anything but certain.

Wendt has done a lot of scrambling lately. Not long ago, SmithKline's stock rose on rumors that he was about to resign. But he bought time last fall with a restructuring plan that spun off 16% of Beckman Instruments Inc., an offering that raised \$85.5 million for the highly successful subsidiary. He says similar "unbundling" could occur this year with SmithKline Bio-Science Laboratories, a biological testing unit, and Allergan Inc., the parent company's eye-care subsidiary.

As the takeover talks continue, Wendt can count a few pluses. His restructuring will shrink SmithKline by 1,600 workers, to about 40,000, by the end of next year and will produce \$100 million in annual savings by the beginning of 1991. SmithKline's over-the-counter version of Tagamet could debut before 1994, when the prescription drug goes off patent. And international sales are rising strongly—a special point of pride for Wendt, a Japanophile who rose through its overseas operations.

Still, Wendt has his hands full. Acknowledging that the company has taken some "real body blows," he vows that "it's not business as usual at SmithKline." If he can survive a takeover and this year's predicted mediocre results, even pushing up earnings a bit, his restructuring could start to pay off. But without improvement and a few breaks on the acquisition front, all the smiling confidence in the world won't make a difference.

By Joseph Weber in Philadelphia



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Ask Michael A. Carpenter to describe himself, and you'll get an immediate answer. "I'm a strategist," he says. And that's a good thing. Carpenter will need an exceptional master plan at Kidder, Peabody & Co., where he took the reins in January. The affable, British-born executive has one of the toughest jobs on Wall Street: reinvigorating a securities firm sapped by widespread malaise and the defections of its top stars.

One of the top priorities for Carpenter, 41, is to lift Kidder to a prominent position in investment banking. For years, Kidder had a cherished reputation in dealmaking. But that soured when Martin A. Siegel, once Kidder's



KIDDER PEABODY'S
REPUTATION IS STILL
TARNISHED FROM THE
INSIDER-TRADING MESS,
AND MANY FORMER
STARS ARE GONE. SO GE'S
PROCONSUL NEEDS
ALL HIS STRATEGIC
SKILLS TO RESTORE THE
FIRM'S LUSTER

top mergers strategist, was indicted in early 1987 on insider-trading charges. Kidder's image hit bottom a few months later when it paid \$25.3 million to the Securities & Exchange Commission to settle charges for its role in Wall Street's insider-trading scandal.

THE PROBLEMS DON'T stop there. Kidder's financial woes seemed to be over when General Electric Co. bought an 80% stake in April, 1986. But GE and Kidder dealmakers rarely worked together and even, some insist, competed against one another for choice deals. In January and February all the trouble of the previous few years came to a boil with the resignations of such Kidder stalwarts as President Max C. Chapman Jr., merchant-banking co-heads Peter D. Goodson and Donald J. Gogel, and investment-banking chief Michael D. Madden.

As if Carpenter didn't have enough on his plate, he also must contend with Kidder's retail-brokerage unit. Since the crash of October, 1987, the retail-securities business has been a downer for virtually every Wall Street firm involved in it. Although Carpenter has vigorously denied persistent rumors that GE will sell Kidder's retail department, Wall Street experts say that it would fit neatly into Smith Barney, Harris Upham & Co.'s plans to go head-to-head with Merrill Lynch, Pierce, Fenner & Smith Inc. and Shearson Lehman Hutton Inc.

Carpenter previously worked at Boston Consulting Group. He then joined GE and became Chairman John F. Welch Jr.'s top strategist in 1983, playing a key role when GE acquired RCA Corp. in 1986. Carpenter has been coveted for years. "I tried to hire Mike for Kidder 12 years ago," Goodson says.

For Carpenter, merely stopping the exodus at Kidder would be a major achievement. But if he manages to restore the firm's lost luster, he'll earn a spot in the turnaround hall of fame.

By Jon Friedman in New York

MICHAEL CARPENTER

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"Just another brake job? There's no such thing in my book."

Stephen V. Thompson

Stephen Thompson
Mr. Goodwrench Service Technician
Sycamore Chevrolet, Terre Haute, Indiana



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Mr. Goodwrench

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THE POWER IS ON

ALLAN LOREN

One day in 1984, Allan Z. Loren of Cigna went to a computer buyers' conference and walked out with a Macintosh computer. It was a gift from Apple Computer Inc. founder Steven P. Jobs, who was trying to woo business customers by giving out Macs to influential corporate buyers. Loren, then head of Cigna's information systems, was delighted. But he didn't have much use for it at the office, so he took it home, where he and his son played with it.

A story like that is the last thing Loren would want to hear today. Loren, 50, now works for Apple, and getting Macintoshes into offices—and keeping them there—is crucial to his mission. In August, Chairman John Sculley promoted him to what looks like the company's No. 2 position: the president of Apple USA, its largest unit.

IT'S NOT THE most comfortable spot. Apple has doubled in size since 1986, but now the Cupertino (Calif.) computer maker's momentum is slowing. Profits in the fiscal year ending Sept. 30 are expected to grow only 7%, to \$426 million, on a 30% increase in sales, to \$5.3 billion. Although Apple is introducing several new Macintosh models this year, profit margins appear to have peaked, too. CEO Sculley's goal of sharply increasing Apple's market share—from 11% now to 20% by the early 1990s—will become harder than ever to attain as heavyweight competitors



**SPEEDING APPLE'S
LAGGING GROWTH
FALLS TO APPLE USA'S
PRESIDENT. AS HEAD OF
THE BIGGEST DIVISION,
HE MAY BE HEIR-
APPARENT. BUT FIRST
HE MUST BATTLE FOR
MARKET SHARE**

such as IBM and Digital Equipment Corp. introduce machines that mimic the Mac's easy-to-use format.

Some Apple-watchers have been surprised by Loren's meteoric rise. He spent several years with a computer consulting firm run by investor Saul Steinberg's Reliance Group, and then 16 years at Cigna before Sculley hired him in 1987 to run the company's internal computer systems. The burly, gruff New Yorker contrasts sharply with the laid-back Californians and smooth marketers who traditionally have run Apple. "Loren still has to prove himself as a marketing whiz," says Prudential-Bache Securities Inc. analyst Kimball Brown. But Sculley apparently believes that Loren's empathy with the corporate pin-striped computer users will be vitally important.

So far, his imprint seems to be more on management than marketing. He has shaken up Apple USA, tapping his own lieutenants and pushing out marketing troops from headquarters to field offices. Critics say the reorganizations hurt morale, while analysts blame the turmoil in part for Apple's recent ill-timed price hike on Macs and its stockpiling of expensive memory chips—blunders that will pummel Apple's March quarter earnings.

But Loren contends that the moves were necessary, and eventually they will bear fruit. "The role of leadership is not to make all the popular decisions," he says. "It's making sure the company prospers." In his new post, Loren will certainly be tested on that.

By Maria Shao in Cupertino



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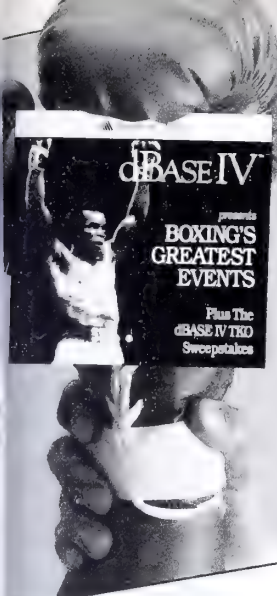
There are lots of other exciting prizes.

50 First prizes: Compaq SLT Portable Laptop PCs, Model 201

100 Second prizes: Hard-to-get, easy-to-wear Ashton-Tate dBase IV TKO jackets.

500 Third prizes: Free pay-per-view certificates to watch the Leonard/Hearns fight on cable TV.

Early Bird prize: Two trips for two to either Sugar Ray Leonard's or Tommy Hearns' training camp prior to the fight.



Winner by Technical Knockout.

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"dBASE IV has emerged hardy, healthy and equal to the task of proving itself to the skeptical."

—The New York Times

"If you program in dBASE III PLUS, an upgrade to dBASE IV is irresistible."

—InfoWorld

"dBASE IV offers the most powerful tools for both non-programmers and programmers, and is much easier to use than its competitors... It achieved the only four star rating."

—Software Digest

"It will dominate the MS-DOS and OS/2 database market during the next two years."

—Computer Currents

"Ashton-Tate has done a terrific job with dBASE IV."

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"It represents a quantum leap over dBASE III PLUS in functionality, power, and ease of use."

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H

ow does it feel to win the lottery? Not Randal B. McDonald, CEO of Pennzoil. After last year's \$3 billion Texaco settlement

Texaco Inc. he has \$2.1 billion in cash—

which must be spent. McDonald, 58, had better get started. In the past year earnings from oil and gas operations dropped by 40%.

While Pennzoil's earnings oil and gas operations dropped by 40%, the company's cash flow was up \$114 million. By contrast, the treasurer's office was a cash cow. It earned \$142 million in interest income—more income than any division. And even though McDonald bought back 10% of Pennzoil's shares last year, the stock languishes.

McDonald fields investment pitches for everything from airlines to race horses. But he's most interested in oil. Most of Pennzoil's reserves are in the U.S., where exploration is

slow. But he's willing to bet if he can get the settlement back into oil and gas, he can avoid some of the \$300 million in taxes due on it. That's because he considers the settlement an investment. But experts note that the feds are unlikely to give up without a battle.

The bleak oil market should also give him pause. "There's a lot of risk there," he says. Gas prices, while still cheap, look better. But those properties don't come cheap, and Pennzoil sat on the sidelines. McDonald is looking at Burlington Resources Inc. But the company is being sued by Burlington to block a takeover.



PENNZOIL RAKED IN
\$3 BILLION IN CASH FROM
ITS EPIC LEGAL
SETTLEMENT WITH
TEXACO. AND
THE MONEY HAS BEEN
BURNING A HOLE IN
McDONALD'S POCKET.
WITH PENNZOIL STOCK
LANGUISHING, HE
MUST FIND PROFITABLE
WAYS TO INVEST IT

buying Burlington.

McDonald is used to cat-and-mouse games. He spent 35 years with Arthur Andersen & Co. advising Pennzoil on deals. He and Pennzoil Chairman J. Hugh Lientke spun off such units as Pogo Producing Co. to boost shareholder return. Before joining Pennzoil as CEO early last year, his strategic savvy sent him to the top at Arthur Andersen, where he became chief financial officer and managing partner.

The experience will come in handy. To boost the stock price, McDonald may revert to one of the company's favorite methods: spinoffs. He hopes that Pennzoil's sulfur division would be a likely candidate. Selling the unit would please some investors, who are accustomed to an average 20% annual return over the past 35 years. But they'd probably be happier in the long run if McDonald would start putting Pennzoil's cash to work.



RANDAL McDONALD

"Give me the luxuries of life and I will gladly do without the necessities."

—Frank Lloyd Wright



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THE BUSINESS WEEK TOP 1000

THE TOP 1000 COMPANIES RANKED
BY STOCK-MARKET VALUE

THE TOP 1000 RANKED BY INDUSTRY

ALPHABETICAL LIST OF COMPANIES





HOW TO PUT THE
NUMBERS TO
WORK FOR YOU

COMPOSITES

MARKET VALUE (\$ BILLIONS)	\$2,391	SALES (\$ BILLIONS)	\$3,361
CHANGE FROM YEAR AGO	+ 11%	CHANGE FROM 1987	+ 11%
RETURN ON COMMON EQUITY	15.0%	PROFITS (\$ BILLIONS)	\$200
YEAR AGO	11.2%	CHANGE FROM 1987	+ 32%
RETURN ON INVESTED CAPITAL	14.5%	ASSETS (\$ BILLIONS)	\$6,673
YEAR AGO	12.0%	CHANGE FROM 1987	+ 8%
1988 MARGINS	5.9%	1987 MARGINS	4.9%

AVERAGES

SHARES OUTSTANDING	65 MIL.	1987 EARNINGS PER SHARE	\$2.00
YEAR AGO	64 MIL.	1988 EARNINGS PER SHARE	\$2.71
TURNOVER	72.3%	1989 EARNINGS ESTIMATE	\$3.19
YEAR AGO	87.9%	VARIATION	14.4%
YIELD	2.95%	HELD BY INSTITUTIONS	49%
YEAR AGO	2.83%	YEAR AGO	47%
PRICE	\$40	PAYOUT	36%
YEAR AGO	\$34	YEAR AGO	56%
PRICE-TO-BOOK	306%	PRICE-EARNINGS RATIO	15
YEAR AGO	290%	YEAR AGO	17
RETURN TO INVESTORS	15	HIGH/LOW PRICE	\$43/30

DATA: STANDARD & POOR'S COMPUSTAT SERVICES, INSTITUTIONAL BROKERS
ESTIMATE SYSTEM, VICKERS STOCK RESEARCH CORP

Today more than ever, information is power. And this issue of the Top 1000 is chock-full of pure information. The main tables alone contain nearly 30,000 statistics. The corporations featured in this issue represent a significant share of the U.S. economy. Combined, they have a market value of \$2.4 trillion, which means they account for more than 85% of the nation's public-equity capital.

Composite results for the Top 1000 provide the basis for some enthusiasm about the economy—at the least. Last year these companies reaped an average total return of 15% for their shareholders. That's quite a turnaround from the 3% loss in 1987. The future looks bright, too: Wall Street analysts expect earnings to be up 18% in 1989. That's an impressive performance, even considering the notorious optimism of analysts.

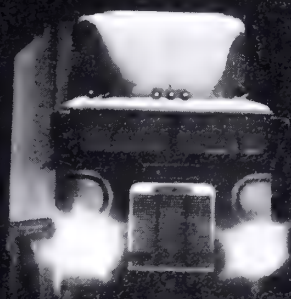
The real value of this issue, however, is its wealth of raw data—figures that can give a competitive edge to anyone who knows how to use them. But to the uninitiated or unwary, this wealth of numbers can be worse than no numbers at all.

Remember that whatever point you want to make, there's a number here that can be your ally. Need to illustrate the prowess of General Motors? Just indicate that it had 1988 sales of \$120 billion, more than Ford and Chrysler put together. But suppose you want to highlight GM's vulnerability? Look instead at return on equity. GM earned 13% last year, while Chrysler earned 14%, and Ford 25%.

Playing such games can be fun—and helpful whenever you need a quick statistic to bolster an argument or add substance to a memo. But unlocking the real power in this issue requires considerably more effort. To evaluate GM relative to Ford and Chrysler, for example, you might want to assess its performance according to an array of financial yardsticks, compare those figures to those of Ford and Chrysler, and see how analysts rate the earnings prospects for all three companies.

There's ample ammunition in the pages of this issue to do all that—and then some. But such assessments take time. As you delve into the Top 1000, be thoughtful—and beware the quick generalization. ■

An important message for the trucking industry about sending and receiving important messages.



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THE

GLOSSARY

MARKET VALUE: Share price on Mar. 17, 1989, multiplied by latest available common shares outstanding

PROFITS: Net income from continuing operations before extraordinary items

MARGINS: Profits as a percent of sales

RETURN ON INVESTED CAPITAL: Profits plus minority interest and interest expense (adjusted by tax rate) as a percent of debt and equity funds

RETURN ON COMMON EQUITY: Net income available for common shareholders divided by common equity

ASSETS: Total assets as reported at end of company's latest available 1988 quarter

COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
1 INTERNATIONAL BUSINESS MACHINES	66346	1	59681	8	5491.0	4	9.2	9.5	12.3	13.9	73037	4
2 EXXON	59023	2	80214y	3	5260.0	9	6.6	6.2	NA	16.8	71721	2
3 GENERAL ELECTRIC	40482	3	49414	4	3386.0	14	6.9	6.3	20.0	18.3	110865	16
4 AMERICAN TELEPHONE & TELEGRAPH	34357	4	35210	4	-1669.0	NM	NM	6.1	NM	-14.6	35152	-9
5 PHILIP MORRIS	26992	6	31742x	13	2124.0	15	6.7	6.5	NA	29.0	20295	8
6 GENERAL MOTORS	25627	5	120388	7	4632.1	30	3.8	3.2	7.7	13.0	164063	1
GM HUGHES ELECTRONICS	3365	NR	11001	6	783.4	17	7.1	6.4	10.6	10.4	11808	6
ELECTRONIC DATA SYSTEMS	2214	NR	4844y	9	384.1	19	7.9	7.3	NA	29.1	3416	10
7 MERCK	25590	9	5940	17	1206.8	33	20.3	17.9	37.5	45.2	6128	8
8 FORD MOTOR	24479	7	92446	16	5300.2	15	5.7	5.8	10.1	24.6	143366	24
9 DU PONT	24303	8	32917	8	2190.0	23	6.7	5.9	13.0	14.5	30719	9
10 AMOCO	20844	10	21157	5	2063.0	52	9.8	6.7	12.1	15.7	29919	19
11 MOBIL	20434	12	54877z	7	2038.0	67	3.7	2.4	NA	13.3	38820	-4
12 RJR HABISCO	19300	27	16956	8	1393.0	29	8.2	6.9	16.8	26.0	17838	6
13 BELL SOUTH	18850	11	13597	11	1665.5	0	12.3	13.6	11.4	14.1	28472	4
14 CHEVRON	18645	15	28900y	-1	1768.0	41	6.1	4.3	NA	11.9	33485	-2
15 WAL-MART STORES	18590	14	20649	29	837.2	33	4.1	3.9	24.3	31.0	7032	18

TOP 1000

THE TOP 1000
U.S. COMPANIES
RANKED BY STOCK-
MARKET VALUE

RECENT SHARE PRICE: Price for a single share of a company's most widely traded issue of common stock as of the close of trading Mar. 17, 1989

HIGH/LOW PRICE: Trading range for company's common stock, Mar. 1988 to Mar. 1989

BOOK VALUE PER SHARE: Sum of common stock, capital surplus, and retained earnings, divided by most recently available common shares outstanding

P-E RATIO: Price-earnings ratio based on 1988 earnings and Mar. 17 stock price

YIELD: Annual dividend rate as a percent of Mar. 17 stock price

PAYOUT: Latest annualized dividend rate as a percent of most recent annual earnings per share

TOTAL RETURN: Annual dividend per share plus current market price, as a percent of year-ago price

INSTITUTIONAL HOLDINGS: Percent of outstanding shares held by banks, colleges, pension funds, insurance companies, and investment companies as calculated by Vickers Stock Research Corp.

SHARES OUTSTANDING: Millions of common shares outstanding as of the company's latest available financial report

TURNOVER: Percent of outstanding common shares changing hands in the latest year

EARNINGS PER SHARE: Primary earnings per share, excluding extraordinary profit or loss, divided

by number of common and common-equivalent shares

EARNINGS PER SHARE ESTIMATES:

Analysts' consensus estimates for 1989 compiled as of Mar. 17 by Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan

VARIATION: Percentage by which two-thirds of the 1989 earnings estimates are above or below the average estimate as calculated by IBES

FY: Number of the month in which company's fiscal year ends

DATA: Unless otherwise indicated, all data in the following Top 1000 tables have been provided by Standard & Poor's Compustat Services Inc., a unit of McGraw-Hill Inc.

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTITUTIONS HOLDING %	SHRS OUT MIL	TURN-OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARIATION %	
113	131/104	168	12	3.91	47	7	49	590	59.7	12	8.72	9.27	10.99	1.6	Office equipment B
45	48/40	189	11	4.88	56	8	34	1308	25.6	12	3.43	3.95	4.13	5.0	Fuel B
45	49/38	219	12	3.65	44	4	47	902	38.8	12	3.27	3.75	4.20	1.7	Conglomerates
32	33/24	300	NM	3.75	DEF	7	23	1074	38.2	12	1.88	-1.55	2.46	5.0	Telecomms. A
117	117/81	369	13	3.85	49	20	64	231	78.2	12	7.75	9.12	11.54	1.4	Consumer E
84	95/69	72	6	7.17	44	25	82	306	63.1	12	10.06	13.64	13.88	11.6	Automotive A
26	41/24	45	13	2.74	37	-5	80	128	5.1	12	1.67	1.96	2.03	2.5	Electrical B
44	47/37	168	14	2.21	30	12	NA	51	57.6	12	2.65	3.15	NA	NM	Office equipment C
65	66/49	959	21	2.29	49	18	55	397	56.5	12	2.23	3.05	3.80	2.6	Health care B
50	57/41	114	5	6.02	27	20	55	491	56.9	12	9.05	10.96	10.44	8.8	Automotive A
102	102/79	161	11	4.14	46	14	40	239	52.3	12	7.39	9.11	10.12	5.4	Chemicals
81	81/68	159	10	4.71	47	7	86	259	35.1	12	5.31	8.01	7.36	8.5	Fuel B
50	50/42	134	10	4.82	48	11	47	411	41.6	12	2.96	4.95	4.93	7.6	Fuel B
87	100/44	364	15	2.54	37	66	45	223	133.9	12	4.19	5.92	NA	NM	Consumer E
41	44/37	159	12	5.81	67	4	26	464	24.9	12	3.46	3.51	3.65	2.9	Telecomms. B
55	55/43	126	11	5.14	54	16	39	342	38.3	12	3.65	5.17	4.81	9.2	Fuel B
33	35/26	688	22	0.49	11	9	31	565	26.6	01	1.11b	1.48	1.84	3.1	Retailing

TO TABLES APPEAR ON PAGES 218-219

THE 1989 BUSINESS WEEK TOP 1000



THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
16 COCA-COLA	18006	17	8338	9	1044.7	14	12.5	12.0	27.6	33.1	7451	-13
17 DOW CHEMICAL	17232	13	16682	25	2410.0	94	14.4	9.3	25.0	33.2	16239	13
18 SEARS, ROEBUCK	16341	20	50251y	9	1032.3	-40	2.1	3.8	15.9	7.4	77533	2
19 ATLANTIC RICHFIELD	15627	21	18324y	8	1583.0	29	8.6	7.2	NA	25.9	21514	-6
20 MINNESOTA MINING & MFG.	15423	19	10581	12	1154.0	26	10.9	9.7	20.5	21.2	8775	8
21 PROCTER & GAMBLE	15315	25	20368	14	1128.0	135	5.5	2.7	14.2	16.3	15793	4
22 JOHNSON & JOHNSON	15257	18	9000	12	974.0	17	10.8	10.4	25.0	27.8	6900	3
23 GTE	15172	31	16460	7	1224.7	9	7.4	7.3	9.8	14.5	31104	8
24 EASTMAN KODAK	14872	26	17034	28	1397.0	19	8.2	8.9	12.1	21.1	22964	59
25 BELL ATLANTIC	14727	23	10880	1	1316.8	6	12.1	11.5	10.7	14.4	24729	5
26 PACIFIC TELESIS GROUP	14348	30	9483	4	1188.0	25	12.5	10.4	11.7	14.7	21191	-1
27 ELI LILLY	13832	33	4070	12	761.0	85	18.7	11.3	NA	23.6	5263	1
28 AMERITECH	13796	29	9903	4	1237.4	4	12.5	12.4	12.2	15.8	19163	2
29 NYNEX	13734	24	12661	5	1315.0	3	10.4	10.6	11.5	14.0	25378	10
30 BRISTOL-MYERS	13344	28	5973	11	829.0	17	13.9	13.1	NA	23.4	5190	10
31 SOUTHWESTERN BELL	13330	34	8453	6	1060.1	1	12.5	13.1	11.0	12.6	20985	-2
32 DIGITAL EQUIPMENT	13318	22	12285	18	1209.1	-6	9.8	12.4	16.2	16.0	10231	9
33 TEXACO	12917	37	35138y	-1	1304.0	NM	3.7	NM	NM	13.3	26337	-22
34 AMERICAN INTERNATIONAL GROUP	12729	40	13087	18	1175.1	24	9.0	8.5	NA	17.6	37273	27
35 AMERICAN EXPRESS	12556	36	22934y	30	988.0	135	4.3	2.4	28.1	21.0	142704	23
36 HEWLETT-PACKARD	12553	16	10296	21	830.0	17	8.1	8.3	NA	18.3	7804	7
37 AMERICAN HOME PRODUCTS	12438	32	5501	9	932.2	10	16.9	16.8	NA	33.0	4611	0
38 ABBOTT LABORATORIES	11495	35	4937	13	752.0	19	15.2	14.4	28.9	30.5	4825	10
39 PEPSICO	11232	42	13007	14	762.2	26	5.9	5.3	NA	25.7	11135	23
40 US WEST	11096	39	9221	6	1131.7	13	12.3	11.6	10.8	14.5	22416	7
41 BOEING	10382	50	16962	9	614.0	28	3.6	3.1	11.2	11.6	12608	0
42 WALT DISNEY	10296	45	3747	27	569.9	35	15.2	14.3	17.5	22.8	5751	50
43 WASTE MANAGEMENT	9784	47	3566	29	464.2	42	13.0	11.9	NA	22.5	4879	46
44 ANHEUSER-BUSCH	9600	41	8924	7	715.9	16	8.0	7.4	17.0	23.1	7110	9
45 McDONALD'S	9340	44	5566	14	645.9	18	11.6	11.2	13.1	19.7	8159	17
46 PFIZER	9242	43	5385	9	791.3	15	14.7	14.0	18.8	18.4	7638	10
47 CITICORP	9174	65	32024	15	1698.0	NM	5.3	NM	18.8	20.9	207666	2
48 DUN & BRADSTREET	9168	48	4267	13	499.0	14	11.7	11.6	NA	24.6	5024	34
49 SCHLUMBERGER	9109	38	4925	12	453.9	-10	9.2	11.4	NA	12.1	5600	-17
50 USX	8224	46	16877x	13	756.0	267	4.5	1.4	10.2	14.0	19474	-4
51 WESTINGHOUSE ELECTRIC	7720	51	12500	10	822.8	-9	6.6	7.9	18.4	21.7	16937	11
52 K MART	7703	54	27655y	7	802.9	16	2.9	2.7	13.3	17.3	12126	9
53 UNION PACIFIC	7524	57	6068	13	558.7	13	9.2	9.2	9.8	12.5	12227	12
54 SOUTHERN	7253	55	7235	1	965.8	38	13.4	9.8	NA	12.7	22374	2
55 OCCIDENTAL PETROLEUM	7235	80	19417	14	313.0	70	1.6	1.1	5.2	4.8	20747	24
56 KELLOGG	7220	62	4349	15	480.4	21	11.0	10.4	28.1	34.3	3307	23
57 ITT	7101	61	9075a	10	1084.7	48	12.0	8.9	13.9	13.9	13722	1
58 PACIFIC GAS & ELECTRIC	7044	64	7646	6	62.1	-90	0.8	8.3	NA	-0.5	21847	2
59 TENNECO	7039	63	13234	11	-1.0	NM	NM	NM	NA	-0.7	17376	-22
60 SCHERING-PLOUGH	7031	70	2969	10	389.8	23	13.1	11.7	26.3	24.3	3426	8

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P. 168

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
51	51/35	575	18	2.36	42	31	53	355	46.0	12	2.43	2.85	3.31	3.8	Consumer C
93	101/78	238	7	3.02	22	11	51	186	90.6	12	6.50	12.82	14.90	6.6	Chemicals
43	46/33	117	16	4.65	74	15	51	380	50.8	12	4.35	2.72	4.44	7.6	Retailing
91	91/74	257	10	4.95	51	16	54	172	48.9	12	6.68	8.78	8.61	7.5	Fuel B
68	70/57	283	13	3.82	51	14	64	227	56.8	12	4.02	5.09	5.64	2.4	Conglomerates
91	93/71	222	15	3.53	54	9	42	169	47.6	06	1.87	5.96	6.82	1.9	Consumer D
91	92/69	435	16	2.21	35	6	63	169	56.9	12	4.83	5.72	6.56	1.0	Health care D
47	47/34	187	13	5.76	75	23	55	326	43.6	12	3.29	3.58	4.10	4.0	Telecomms. B
46	50/39	225	11	4.36	46	11	50	324	67.3	12	3.52	4.31	4.68	1.2	Leisure D
75	76/64	160	11	5.46	61	7	33	197	30.1	12	6.24	6.65	7.09	2.1	Telecomms. B
34	35/27	177	12	5.14	63	22	43	419	34.6	12	2.21	2.81	3.02	2.8	Telecomms. B
01	101/72	429	19	2.68	50	22	71	137	47.2	12	2.83	5.33	6.33	2.2	Health care B
51	53/42	176	11	5.70	64	15	33	269	32.6	12	4.24	4.55	4.72	2.1	Telecomms. B
70	71/61	146	11	5.79	61	2	34	197	40.4	12	6.26	6.63	6.98	1.9	Telecomms. B
46	47/38	376	16	4.31	69	4	56	288	47.4	12	2.47	2.88	3.29	1.0	Health care D
44	44/34	159	13	5.59	70	23	40	300	31.9	12	3.48	3.53	3.76	2.7	Telecomms. B
10	126/86	177	11	0.00	0	-11	69	121	169.8	06	8.53	9.90	9.58	1.9	Office equipment B
53	56/42	131	10	5.67	56	28	42	244	117.8	12	-18.15	5.35	4.05	17.2	Fuel B
78	78/49	192	11	0.51	6	23	48	163	43.7	12	5.74	7.14	7.28	5.2	Nonbank fin. B
30	32/23	270	13	2.79	36	16	61	417	54.9	12	1.20	2.31	3.03	3.4	Nonbank fin. A
54	66/44	277	16	0.63	10	-10	47	233	64.9	10	2.50	3.36	4.02	3.8	Office equipment B
85	89/70	440	13	4.58	61	14	59	146	29.7	12	5.73	6.38	7.14	1.9	Health care B
51	53/43	466	15	2.35	36	1	52	225	54.2	12	2.78	3.33	3.83	1.7	Health care D
43	44/33	379	15	1.97	29	15	55	264	56.0	12	2.30	2.90	3.18	2.4	Consumer C
61	63/50	143	10	5.79	57	13	38	183	31.5	12	5.31	6.17	5.96	2.3	Telecomms. B
68	68/45	196	17	2.36	40	34	61	153	90.2	12	3.10	4.02	6.21	4.4	Aerospace
77	77/54	411	20	0.52	11	21	43	134	69.1	09	2.85	3.80	4.66	3.0	Leisure B
43	45/32	474	21	1.11	23	17	58	226	62.6	12	1.46	2.05	2.48	4.5	Services C
34	35/29	309	14	2.13	29	4	53	283	51.7	12	2.04b	2.45	2.80	1.7	Consumer C
50	54/41	285	15	1.13	16	8	58	188	56.2	12	2.89	3.43	3.92	1.1	Leisure A
56	60/48	215	12	3.94	47	5	61	165	59.3	12	4.08	4.70	5.15	1.8	Health care B
29	29/19	120	6	5.15	30	28	70	319	59.7	12	-4.41	4.87	4.88	6.9	Banks A
49	58/46	453	18	3.55	65	9	63	187	45.8	12	2.35	2.67	3.17	0.9	Publishing/TV B
38	39/31	243	22	3.16	70	6	49	240	57.3	12	1.81	1.72	2.03	12.9	Fuel C
32	34/26	168	12	4.41	53	-1	54	259	67.4	12	0.49	2.62	2.81	16.6	Conglomerates
54	58/48	200	10	3.73	38	8	46	144	53.4	12	6.23	5.66	6.21	2.2	Electrical A
39	40/30	166	10	3.42	33	11	76	199	65.0	01	3.40	4.00	4.22	3.2	Retailing
67	73/55	171	14	3.30	45	19	61	113	55.4	12	4.90	4.90	5.76	5.7	Transportation B
23	25/20	109	9	9.25	79	10	28	314	39.8	12	1.92	2.72	2.68	6.0	Utilities A
27	29/25	114	21	9.26	198	13	40	268	66.8	12	0.78	1.26	1.91	22.0	Fuel B
59	69/50	516	15	2.93	44	20	71	123	30.5	12	3.20	3.90	4.41	2.6	Food B
53	56/44	93	9	2.80	23	11	61	134	62.8	12	7.20	5.99d	6.34	3.5	Conglomerates
17	19/14	95	NM	8.06	DEF	11	31	405	35.6	12	1.29	-0.10	1.83	6.9	Utilities A
47	51/40	194	NM	6.42	DEF	21	45	149	79.2	12	-1.22	-0.18	3.78	18.6	Conglomerates
63	63/45	438	18	2.56	46	11	66	113	54.6	12	2.73	3.48	4.17	1.2	Health care B

TO TABLES APPEAR ON PAGES 218-219



THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
61 COMMONWEALTH EDISON	6979	72	5613	-1	737.5	-32	13.1	19.2	7.8	9.1	20196	0
62 J. P. MORGAN	6958	71	7839	15	1001.8	1103	12.8	1.2	24.0	17.9	83923	11
63 SCECORP	6936	58	6253	12	808.5	12	12.9	12.9	10.3	15.0	15781	10
64 CAPITAL CITIES/ABC	6837	73	4773	8	387.1	39	8.1	6.3	10.7	13.4	5909	14
65 EMERSON ELECTRIC	6682	49	6793	8	540.7	12	8.0	7.6	17.2	18.7	5327	5
66 TIME	6611	88	4507	7	289.0	16	6.4	6.0	NA	21.4	4593	6
67 BURLINGTON RESOURCES	6583	NR	2167	-9	69.6	-70	3.2	9.6	3.6	2.3	5589	6
68 SQUIBB	6494	56	2586	20	425.5	19	16.5	16.6	32.2	32.1	3083	11
69 LOEWS	6474	79	10865y	17	890.4	36	8.2	7.0	19.2	23.4	25467	17
70 J.C. PENNEY	6473	60	15296y	-3	807.0	33	5.3	3.9	14.8	25.5	12254	4
71 SMITHKLINE BECKMAN	6427	52	4749	10	229.2	-60	4.8	13.2	14.6	14.8	5017	13
72 MCI COMMUNICATIONS	6413	165	5137	30	356.0	356	6.9	2.0	NA	28.1	5584	6
73 MONSANTO	6376	69	8293	9	591.0	36	7.1	5.7	13.6	15.6	8439	0
74 H. J. HEINZ	6318	84	5639	11	424.7	12	7.5	7.4	18.8	26.7	4032	13
75 NORFOLK SOUTHERN	6252	83	4462	8	635.1	268	14.2	4.2	NA	12.3	10059	3
76 XEROX	6172	82	16441	9	387.8	-33	2.4	3.8	7.9	6.5	12174	8
77 AMERICAN BRANDS	6017	100	11980x	19	540.8	8	4.5	5.0	13.7	22.0	7904	13
78 GANNETT	6002	66	3314	8	364.5	14	11.0	10.4	14.2	21.4	3793	8
79 WARNER COMMUNICATIONS	5983	125	4206	24	423.2	29	10.1	9.6	NA	25.2	4154	19
80 GENERAL RE	5962	101	2736	-12	518.5	13	19.0	14.8	NA	19.5	9306	-4
81 CHRYSLER	5847	90	35473	21	1050.2	-19	3.0	4.4	11.3	14.4	48567	14
82 UNITED TECHNOLOGIES	5819	87	18000	5	659.1	11	3.7	3.4	13.9	13.7	12748	-1
83 CATERPILLAR	5819	59	10435	26	616.0	93	5.9	3.8	14.1	15.0	9686	27
84 ROCKWELL INTERNATIONAL	5714	91	12134	2	779.0	15	6.4	5.7	18.9	20.7	8406	-2
85 BERKSHIRE HATHAWAY	5633	148	2026a	-6	285.7	56	14.1	8.5	8.6	9.5	6206	9
86 MAY DEPARTMENT STORES	5595	78	11742y	15	503.0	14	4.3	4.3	NA	17.8	8144	32
87 AETNA LIFE & CASUALTY	5583	97	24296	5	667.7	-23	2.7	3.7	10.1	10.3	81533	8
88 PHILLIPS PETROLEUM	5534	129	11304	5	650.0	1757	5.8	0.3	15.3	32.0	11968	-1
89 GULF & WESTERN	5484	104	3123	5	389.2	11	12.5	11.8	NA	17.1	5439	10
90 RALSTON PURINA	5468	94	6046	7	372.6	11	6.2	6.0	19.6	29.6	4198	10
91 WARNER-LAMBERT	5466	89	3908	14	340.3	15	8.7	8.6	NA	36.2	2703	9
92 UPJOHN	5442	76	2754	9	353.4	16	12.8	12.1	19.0	20.0	3139	3
93 UNITED TELECOMMUNICATIONS	5426	180	6493	121	141.8	NM	2.2	NM	NA	9.0	9817	50
94 LIMITED	5376	130	4071	15	245.1	4	6.0	6.7	17.9	29.7	2146	11
95 ALUMINUM CO. OF AMERICA	5374	127	9795	26	861.4	285	8.8	2.9	16.0	19.8	10606	57
96 WEYERHAEUSER	5371	75	10004	13	564.4	26	5.6	5.1	11.1	13.5	15387	19
97 SARA LEE	5233	112	11206	16	376.9	28	3.4	3.1	NA	20.0	5663	12
98 MOTOROLA	5220	67	8250y	23	445.0	44	5.4	4.6	13.9	13.6	6710	22
99 CONSOLIDATED EDISON CO. OF N.Y.	5173	98	5109	0	599.3	9	11.7	10.8	9.6	13.3	9552	1
100 INTERNATIONAL PAPER	5152	109	9535	23	754.0	85	7.9	5.2	13.2	16.4	8818	9
101 AMERICAN ELECTRIC POWER	5056	85	4841	1	693.0	19	14.3	12.2	10.3	15.0	14262	2
102 FEDERAL NATIONAL MORTGAGE ASSN.	5015	195	10635y	6	506.7	35	4.8	3.7	10.6	23.9	112314	9
103 PPG INDUSTRIES	4974	116	5617	8	467.6	24	8.3	7.3	17.2	20.8	5154	3
104 SYNTEX	4972	118	1336	12	318.9	17	23.9	22.9	40.4	43.8	1437	16
105 UNOCAL	4946	117	9154y	5	24.0	-87	0.3	2.1	NM	1.2	9508	-6

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
33	35/23	100	11	9.09	100	24	48	212	61.7	12	4.73	3.01	3.45	5.2	Utilities A
38	40/31	126	7	4.33	31	-2	65	181	58.8	12	0.39	5.38	5.51	5.7	Banks A
32	37/30	137	9	7.81	71	4	32	218	45.0	12	3.08	3.49	3.56	2.4	Utilities A
380	385/297	237	17	0.05	1	2	76	18	47.1	12	16.46	22.31	25.38	4.1	Publishing/TV A
30	35/27	232	13	3.76	48	-10	63	225	40.3	09	2.00	2.31	2.56	1.1	Electrical A
114	123/84	490	23	0.88	20	16	66	58	65.8	12	4.18	5.01	6.21	3.3	Publishing/TV B
44	52/23	218	NM	1.32	NA	85	10	150	52.6	12	0.46	1.54	1.87	6.8	Fuel B
67	71/56	490	16	2.99	47	4	63	97	76.6	12	3.42	4.30	5.15	1.3	Health care B
86	86/62	170	7	1.17	9	9	50	76	47.0	12	8.41	11.70	9.52	10.5	Nonbank fin. A
53	56/44	209	9	3.80	33	10	64	123	64.4	01	4.11	6.02	5.88	6.3	Retailing
52	60/41	416	28	3.56	100	-10	66	124	110.3	12	4.50	1.84	4.16	6.0	Health care B
27	27/10	520	21	0.00	0	114	71	242	204.4	12	0.30	1.27	2.10	7.9	Telecomms. A
93	93/74	168	11	3.24	36	3	65	69	111.2	12	5.63	8.27	9.89	5.6	Chemicals
49	50/38	397	17	2.92	49	13	53	128	39.4	04	2.91	3.31d	3.73	1.5	Food B
35	36/25	121	10	3.79	38	18	62	179	40.8	12	0.91	3.51	3.69	6.0	Transportation B
60	67/50	113	17	4.98	86	14	72	102	78.4	12	5.35	3.50	6.33	7.7	Office equipment B
65	72/42	252	12	3.78	45	43	41	93	56.0	12	4.42	5.44	6.23	4.6	Consumer E
37	39/29	352	16	2.92	48	3	67	162	48.3	12	1.98	2.26	2.42	2.8	Publishing/TV B
47	47/29	356	18	1.19	21	30	69	127	78.1	12	1.87	2.65	2.82	3.9	Leisure B
64	64/46	225	12	1.87	22	18	84	93	59.6	12	4.79	5.44	6.00	3.2	Nonbank fin. B
25	30/21	81	5	3.98	21	8	58	233	75.3	12	5.90	4.66	5.39	9.2	Automotive A
45	46/35	121	9	3.60	32	11	65	131	56.9	12	4.52b	5.05	5.24	2.8	Aerospace
57	69/54	141	9	2.09	20	-8	69	101	93.5	12	3.20	6.07	6.41	5.8	Manufacturing C
22	24/18	152	7	3.24	24	19	41	257	30.1	09	2.23b	3.01	2.48	6.5	Conglomerates
15	5025/3100	171	18	0.00	0	50	7	1	3.3	12	187.24	273.37	265.00	18.7	Nonbank fin. B
38	40/29	198	11	3.41	37	-5	58	149	61.1	01	2.90	3.42	3.74	3.7	Retailing
50	53/40	87	9	5.55	47	10	72	112	56.8	12	7.48	5.85	5.62	7.4	Nonbank fin. B
23	23/14	277	8	3.87	32	47	49	243	97.1	12	0.06	2.72	2.74	12.5	Fuel B
47	47/37	242	15	1.49	22	7	56	117	60.9	10	2.88	3.21	3.55	3.0	Conglomerates
81	88/68	435	15	2.04	31	10	47	68	47.0	09	7.27	5.28	6.19	2.0	Food B
81	82/60	582	16	3.18	51	5	65	68	82.2	12	4.15	5.00	5.88	1.4	Health care B
29	35/27	308	15	3.00	46	-2	60	185	88.0	12	1.63	1.90	2.29	3.8	Health care B
53	53/27	354	39	3.63	141	63	59	103	91.2	12	-0.55	1.36	3.48	17.5	Telecomms. A
30	32/17	651	22	0.80	18	35	38	179	61.9	01	1.25	1.36	1.87	8.4	Retailing
61	66/42	124	6	2.63	16	37	80	88	105.7	12	2.52	9.74	10.12	10.8	Metals A
26	30/23	133	10	4.55	45	-6	51	204	54.9	12	2.12	2.68	2.86	7.1	Paper A
46	52/35	289	16	3.11	51	12	41	113	53.2	06	2.35	2.83	3.35	2.3	Food B
40	55/36	159	12	1.89	22	-9	65	130	113.4	12	2.39	3.43	3.79	6.3	Electrical B
45	47/41	123	9	7.58	70	6	27	114	41.8	12	4.42	4.93	4.78	3.8	Utilities A
46	52/40	116	7	3.21	23	8	63	112	110.3	12	3.68	6.57	7.39	6.1	Paper B
26	29/26	121	8	9.07	73	2	33	194	45.9	12	2.60	3.24	3.16	2.6	Utilities A
64	64/32	236	10	1.51	15	71	87	79	139.4	12	4.66	6.43	7.69	6.1	Nonbank fin. A
43	47/36	222	10	3.14	32	11	43	115	41.1	12	3.19	4.26	4.80	4.9	Housing A
43	44/32	683	17	3.01	52	7	52	115	91.0	07	2.07	2.51	2.91	2.0	Health care B
42	43/32	242	NM	2.36	476	25	65	117	77.6	12	1.56	0.21	2.49	11.6	Fuel B

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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
106 AMERICAN CYANAMID	4911	111	4592	10	305.6	16	6.7	6.3	14.9	15.4	4593	11
107 McCAW CELLULAR COMMUNICATIONS	4907	235	311	58	-297.0	NM	NM	NM	NM	NM	2076	32
108 ALLIED-SIGNAL	4901	105	11909	7	463.0	-10	3.9	4.6	13.1	14.2	10005	-2
109 PUBLIC SERVICE ENTERPRISE GROUP	4877	103	4395	4	559.9	0	12.7	13.3	9.8	13.5	11690	8
110 TOYS 'R' US	4869	115	4000	28	268.0	31	6.7	6.5	19.5	21.2	2903	24
111 KIMBERLY-CLARK	4830	110	5394	10	378.6	16	7.0	6.6	16.8	20.3	4268	7
112 TEXAS UTILITIES	4775	123	4154	2	737.6	-4	17.8	18.8	9.5	11.4	16058	15
113 BAXTER INTERNATIONAL	4757	74	6861	10	388.0	20	5.7	5.2	NA	12.1	8550	12
114 GENERAL MILLS	4747	119	5429	10	280.7	13	5.2	5.0	22.6	33.6	2870	9
115 AMP	4619	81	2670	15	319.1	28	12.0	10.8	20.5	21.0	2376	14
116 TELE-COMMUNICATIONS	4614	121	2134a	51	-0.8	NM	NM	3.6	-0.1	-0.1	7618	23
117 TIMES MIRROR	4549	102	3333y	6	331.9	25	10.0	8.5	14.6	20.7	3380	12
118 SECURITY PACIFIC	4482	163	8483	11	638.9	3969	7.5	0.2	15.7	17.5	77870	7
119 RAYTHEON	4480	99	8192	7	489.6	10	6.0	5.8	25.3	24.3	4740	14
120 MELVILLE	4469	151	6780	14	354.5	24	5.2	4.8	NA	23.2	2736	23
121 DUKE POWER	4456	113	3627	-2	448.1	-10	12.4	13.5	8.9	11.5	8891	4
122 WCR	4439	95	5990	6	439.3	5	7.3	7.4	17.4	19.6	4717	4
123 INTEL	4423	92	2875	51	452.9	83	15.8	13.0	19.8	21.8	3550	42
124 LIN BROADCASTING	4369	184	226	8	82.1	48	36.4	26.6	20.8	19.7	573	-8
125 AMERICAN TV & COMMUNICATIONS	4304	198	812	14	70.4	42	8.7	6.9	10.7	29.4	1508	26
126 UNISYS	4302	96	9902	2	680.6	18	6.9	6.0	11.2	16.3	11535	6
127 APPLE COMPUTER	4296	86	4434	46	419.3	50	9.5	9.2	36.7	36.7	2276	40
128 MARSH & McLENNAN	4272	132	2272y	6	296.3	-2	13.0	14.1	40.8	39.8	1830	12
129 BROWNING-FERRIS INDUSTRIES	4264	124	2172	23	235.7	28	10.9	10.5	14.4	21.7	2337	16
130 BORDEN	4222	128	7244	11	311.9	17	4.3	4.1	13.1	16.9	4440	8
131 PACIFICORP	4222	138	3519	7	446.7	9	12.7	12.5	NA	23.1	11396	11
132 UNION CARBIDE	4162	164	8324	20	720.0	210	8.7	3.4	20.5	44.4	8441	7
133 AMERICAN GENERAL	4147	108	3823	12	413.0	6	10.8	11.4	NA	9.4	30422	20
134 CIGNA	4126	138	17889	5	410.2	-35	2.3	3.7	NA	7.5	55825	3
135 BANKAMERICA	4082	333	10181	0	547.0	NM	5.4	NM	12.8	14.2	94647	2
136 ARCHER-DANIELS-MIDLAND	4071	156	7379	19	364.4	10	4.9	5.4	11.6	12.9	4817	5
137 CPC INTERNATIONAL	4064	131	4700	-4	289.1	-19	6.2	7.2	NA	25.4	3342	3
138 PHILADELPHIA ELECTRIC	4028	143	3229	1	566.0	5	17.5	17.0	9.9	13.0	11863	6
139 DOMINION RESOURCES	4022	126	3344	2	491.0	2	14.7	14.7	9.6	13.6	10282	4
140 CBS	4012	137	2778	1	283.4	108	10.2	4.9	10.9	12.3	4579	22
141 CAMPBELL SOUP	4010	136	5269	14	258.8	-2	4.9	5.7	11.3	13.3	4100	24
142 QUAKER OATS	3980	142	5616	15	259.2	24	4.6	4.3	18.2	20.1	2942	6
143 GEORGIA-PACIFIC	3978	135	9509	11	467.0	2	4.9	5.3	11.4	17.7	7114	21
144 TELEDYNE	3937	134	4523	8	391.8	4	8.7	9.0	16.2	18.3	5125	4
145 TANDY	3937	153	3992	9	321.3	11	8.0	7.9	NA	17.4	2877	19
146 TRAVELERS	3933	145	18986	5	429.6	0	2.3	2.4	NA	9.2	53332	-1
147 DEERE	3905	174	5461	16	296.3	124	5.4	2.8	13.5	12.1	5703	12
148 CONTEL	3878	213	2964	9	311.6	262	10.5	3.2	NA	20.2	5907	7
149 FPL GROUP	3852	139	5854	32	493.3	9	8.4	10.2	10.2	13.7	11793	5
150 PNC FINANCIAL	3811	160	3827	21	442.7	73	11.6	8.1	31.0	17.5	40811	12

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P. B

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
50	56/44	247	15	2.40	35	5	54	98	97.4	12	2.89	3.41	4.00	3.5	Chemicals
37	40/18	5395	NM	0.00	0	65	10	132	41.5	12	-1.31	-2.39	-1.26	55.7	Telecomms. A
33	37/31	150	11	5.43	58	9	49	148	42.1	12	3.07	3.10	3.46	2.0	Conglomerates
24	25/22	124	9	8.59	79	5	35	205	37.5	12	2.55	2.57	2.59	4.2	Utilities A
38	41/33	386	19	0.00	0	5	68	129	62.7	01	1.56	2.04	2.53	3.6	Retailing
60	66/51	259	13	2.67	34	10	54	81	80.7	12	3.73	4.71	5.36	3.0	Paper B
28	29/25	85	7	10.34	73	8	55	169	113.5	12	4.55	4.00	4.17	4.8	Utilities A
19	26/16	158	15	2.58	38	-23	54	246	85.6	12	1.10	1.31	1.54	3.5	Health care D
58	58/43	550	16	3.26	51	13	59	82	67.4	05	3.05	3.71	4.36	2.0	Food B
43	54/41	304	15	2.79	41	-10	74	107	61.6	12	2.31	2.96	3.26	3.1	Electrical D
28	30/20	504	NA	0.00	NA	1	65	165	103.7	12	0.04	NAd	0.05	424.7	Publishing/TV A
35	39/29	283	14	2.83	39	-6	37	129	36.7	12	2.06	2.58	2.35	4.0	Publishing/TV B
40	42/28	127	7	4.92	35	21	64	112	79.2	12	0.01	5.59	6.36	2.5	Banks D
68	74/61	223	9	2.96	27	-2	64	66	49.9	12	6.12	7.35	8.01	1.8	Electrical B
41	41/31	293	13	3.17	40	22	38	109	38.0	12	2.63	3.26	3.48	12.4	Retailing
44	48/42	129	11	6.73	76	0	45	101	40.8	12	4.40	3.90	4.70	3.2	Utilities A
56	70/51	198	10	2.22	23	-4	64	79	97.3	12	4.51	5.33	5.73	2.1	Office equipment B
25	37/19	213	10	0.00	0	-9	71	181	223.8	12	0.98	2.51	2.10	13.4	Electrical D
85	96/50	1048	55	0.00	0	72	71	51	161.0	12	0.99	1.54	2.02	5.6	Publishing/TV A
40	40/22	1796	61	0.00	0	41	16	109	23.0	12	0.45	0.65	0.98	6.5	Publishing/TV A
27	39/25	122	8	3.69	28	-19	72	159	99.6	12	3.15	3.58	3.58	6.5	Office equipment B
35	48/35	376	11	1.15	13	-15	65	123	291.3	09	1.65	3.08	3.34	4.8	Office equipment B
60	60/48	574	15	4.18	61	16	59	72	36.3	12	4.06	4.09	4.32	4.4	Nonbank fin. A
29	30/21	392	19	1.95	37	8	61	148	59.0	09	1.15	1.51	1.79	1.4	Services C
57	61/48	228	14	2.73	37	5	48	74	47.7	12	3.62	4.22	4.86	1.3	Food B
34	37/33	229	10	7.71	76	7	21	123	28.6	12	3.60	3.46	3.72	5.0	Utilities A
30	33/17	257	6	3.31	19	30	59	138	177.1	12	1.76	5.31	6.32	9.0	Chemicals
34	37/27	95	10	4.48	47	2	67	124	50.0	12	3.82b	3.22	3.64	8.5	Nonbank fin. B
53	55/43	81	11	5.64	61	17	82	79	52.7	12	7.25	4.89	4.71	12.2	Nonbank fin. B
22	22/9	119	8	0.68	5	142	31	186	99.7	12	-6.43	2.77	4.55	19.0	Banks D
23	24/18	144	12	0.44	5	16	56	178	81.5	06	1.47	1.95	2.07	7.0	Food B
52	58/44	357	14	3.08	43	9	59	78	75.7	12	4.34	3.68	4.19	1.7	Food B
20	21/17	112	8	11.28	94	16	17	207	45.0	12	2.33	2.33	2.34	3.7	Utilities A
41	45/40	125	9	7.80	71	2	36	98	51.8	12	4.54	4.52	4.52	3.2	Utilities A
70	183/146	183	15	2.59	40	0	70	24	61.5	12	5.21	11.02	10.69	11.5	Publishing/TV A
31	35/24	207	17	2.97	49	12	52	129	23.8	07	1.91	1.87	2.37	2.2	Food B
50	62/43	308	16	2.39	38	15	51	79	79.8	06	2.36	3.20	3.71	2.7	Food B
42	43/33	151	9	3.34	29	8	62	95	70.6	12	4.23	4.76	5.56	10.9	Paper A
52	373/317	184	10	1.14	12	5	37	11	38.1	12	32.25	34.03	30.31	6.8	Conglomerates
44	49/38	213	12	1.37	17	9	64	90	98.2	06	2.70	3.54	3.80	1.5	Office equipment B
38	39/33	86	9	6.25	58	6	71	103	52.6	12	4.10b	4.14	3.66	10.1	Nonbank fin. B
52	52/41	159	13	2.30	30	12	87	75	128.0	10	-1.46	4.06	4.92	12.6	Manufacturing C
49	49/31	251	13	4.21	53	43	59	79	63.4	12	1.00b	3.95	3.54	4.1	Telecomms. B
29	32/28	118	9	7.49	64	4	47	131	48.6	12	3.10	3.42	3.35	3.8	Utilities A
41	47/38	152	8	4.54	37	2	46	92	41.9	12	3.00	5.09	5.60	2.1	Banks A

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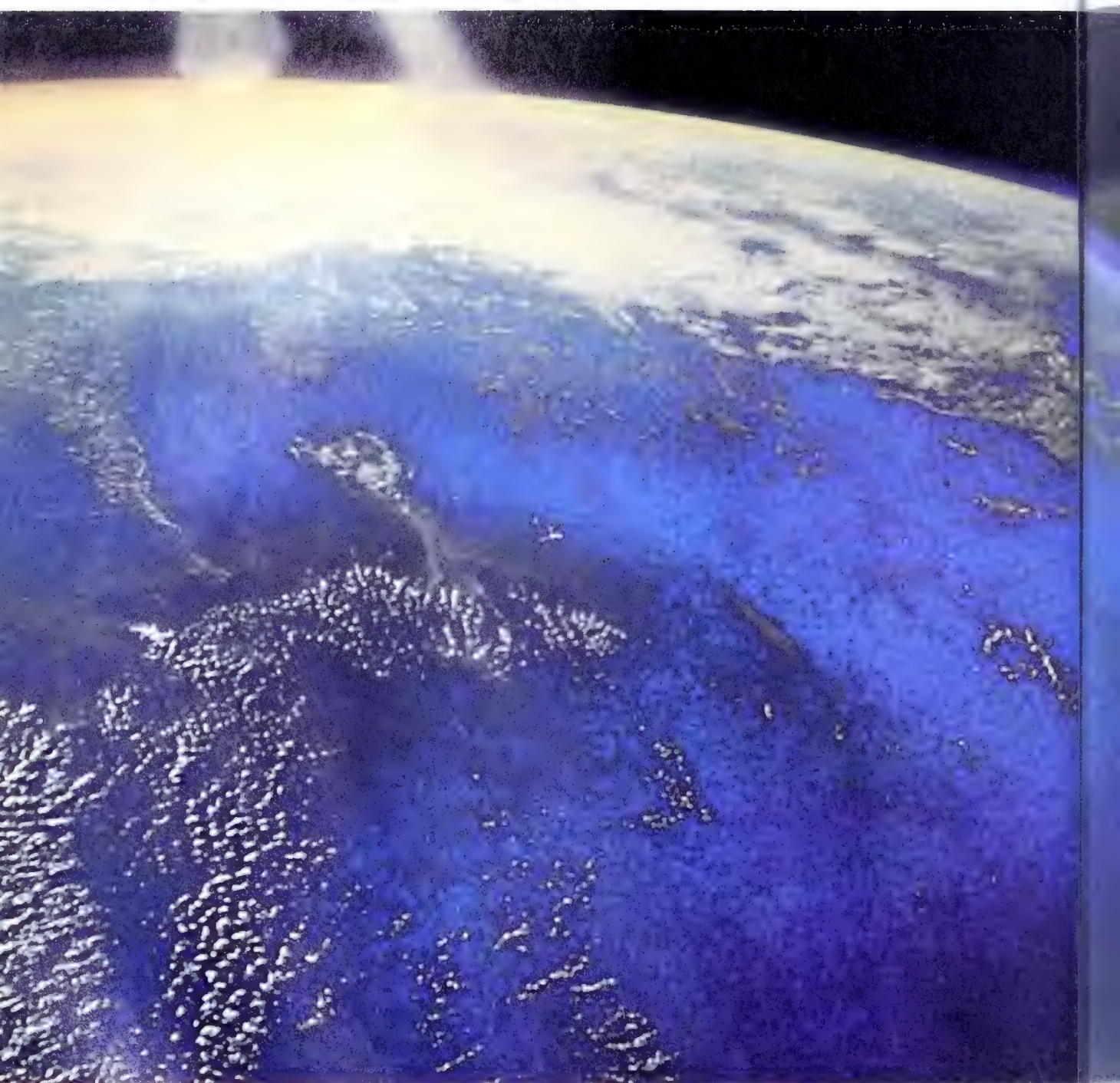
		MARKET VALUE		SALES		PROFITS						ASSETS	
		\$ MIL.	1988 RANK	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %
								12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
151	SUN	3766	68	10000y	2	7.0	-98	0.1	3.5	NM	0.1	11932	4
152	MCA	3760	170	3024y	17	164.9	20	5.5	5.3	7.8	10.2	3840	12
153	DAYTON HUDSON	3724	166	12204y	14	287.9	26	2.4	2.1	10.0	15.2	6823	9
154	HEWMONT GOLD	3671	140	389	47	108.1	26	27.8	32.3	33.1	32.5	511	79
155	CHA FINANCIAL	3652	180	8204	15	404.1	-4	4.9	5.9	NM	12.0	22941	17
156	MARION LABORATORIES	3616	169	627	19	181.0	45	21.9	18.0	47.5	39.2	627	41
157	WELLS FARGO	3540	192	4860	6	512.5	909	10.5	1.1	NA	22.4	46617	6
158	HOSPITAL CORP. OF AMERICA	3510	206	4111	-12	258.8	NM	6.3	NM	10.8	16.4	5388	-13
159	AMR	3456	217	8824	23	476.8	140	5.4	2.8	10.5	15.4	9434	13
160	MIDDLE SOUTH UTILITIES	3427	273	3565	3	498.0	11	14.0	13.0	8.4	8.5	15913	5
161	CSX	3414	107	7592	9	-38.0	NM	NM	5.4	NM	-1.5	13026	5
162	MCDONNELL DOUGLAS	3412	226	15072	10	350.0	12	2.3	2.3	14.6	11.5	11885	39
163	MASCO	3397	144	2439	21	288.3	32	11.8	10.8	14.4	18.6	3003	9
164	STUDENT LOAN MARKETING ASSN.	3387	189	2172	37	225.1	24	10.4	11.4	8.5	36.8	28628	25
165	MARRIOTT	3386	133	7370	13	232.0	4	3.1	3.4	10.2	32.1	6023	24
166	GILLETTE	3381	114	3581	13	268.5	17	7.5	7.3	NA	NM	2818	5
167	SUN EXPLORATION & PRODUCTION	3357	NB	1286y	-9	-305.0	NM	NM	11.1	NM	-23.8	5429	NA
168	PITNEY-BOWES	3330	154	2650	14	237.0	21	8.9	8.4	14.4	18.8	4788	19
169	BANKERS TRUST NEW YORK	3325	208	5651	4	647.7	NM	11.1	0.0	28.2	18.5	57942	3
170	SANTA FE SOUTHERN PACIFIC	3306	209	3144	11	148.7	-39	4.7	8.5	10.8	30.4	6824	-22
171	WHITMAN	3297	141	3583	17	176.7	-1	4.9	5.8	9.7	11.3	4039	7
172	SALOMON	3269	181	6146y	2	280.0	97	4.6	2.4	26.6	7.5	85256	14
173	BANC ONE	3263	204	2735	15	340.2	47	12.4	9.7	NA	17.2	25274	9
174	HOUSTON INDUSTRIES	3214	146	3596a	0	458.0	-4	12.7	13.3	9.7	12.2	10207	6
175	HALLIBURTON	3205	152	4839y	26	84.6	76	1.7	1.3	4.9	4.0	4772	12
176	McGRAW-HILL	3203	193	1818	4	185.5	13	10.2	9.4	21.1	20.9	1758	7
177	COLGATE-PALMOLIVE	3201	187	4734	8	152.7	NM	3.2	0.0	13.0	15.1	3344	4
178	FOOD LION	3179	161	3815	29	112.5	31	3.0	2.9	21.9	28.0	944	28
179	F. W. WOOLWORTH	3164	173	6088y	13	288.0	15	3.6	3.5	16.2	16.9	3919	18
180	CONSOLIDATED NATURAL GAS	3142	169	2468	6	192.9	4	7.8	6.0	11.3	12.0	3851	3
181	MNCB	3109	320	2830	15	252.5	51	8.9	6.8	26.4	13.3	29848	3
182	DOW JONES	3088	162	1603	22	228.2	12	14.2	15.4	19.2	23.2	2112	9
183	CHASE MANHATTAN	3063	260	12365	15	1058.9	NM	8.6	NM	33.9	23.9	97455	-2
184	POLAROID	3052	263	1863	6	-22.6	NM	NM	7.1	-0.8	-2.2	1957	22
185	OHIO EDISON	3050	186	2143	20	229.9	-46	10.7	23.8	7.4	7.0	7774	-2
186	TEXAS INSTRUMENTS	3044	102	6295	13	366.3	14	5.8	5.7	13.6	19.5	4428	12
187	TRIBUNE	3030	170	2336	9	210.4	49	9.0	6.6	NA	18.0	2942	7
188	PENNZOIL	3022	168	2124	17	-187.0	NM	NM	2.5	NM	-15.7	4480	9
189	CORNING GLASS WORKS	3010	218	2120	0	292.4	55	13.8	9.1	15.5	18.7	2898	9
190	COMPUTER ASSOCIATES INTERNATIONAL	3000	244	925	43	142.4	70	15.4	12.9	NA	23.6	1156	47
191	SCOTT PAPER	2994	190	4726	15	400.9	71	8.5	5.7	15.2	21.8	5156	15
192	CHAMPION INTERNATIONAL	2976	158	5129	11	456.4	19	8.9	8.3	11.0	14.1	6700	8
193	AMERADA HESS	2972	219	4264y	-11	124.2	-46	2.9	4.8	NM	5.8	4993	-8
194	REYNOLDS METALS	2950	224	5567	30	482.0	140	8.7	4.7	17.5	23.6	5032	17
195	ETHYL	2940	200	2011	17	231.0	20	11.5	11.2	15.7	21.1	2195	11

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P.

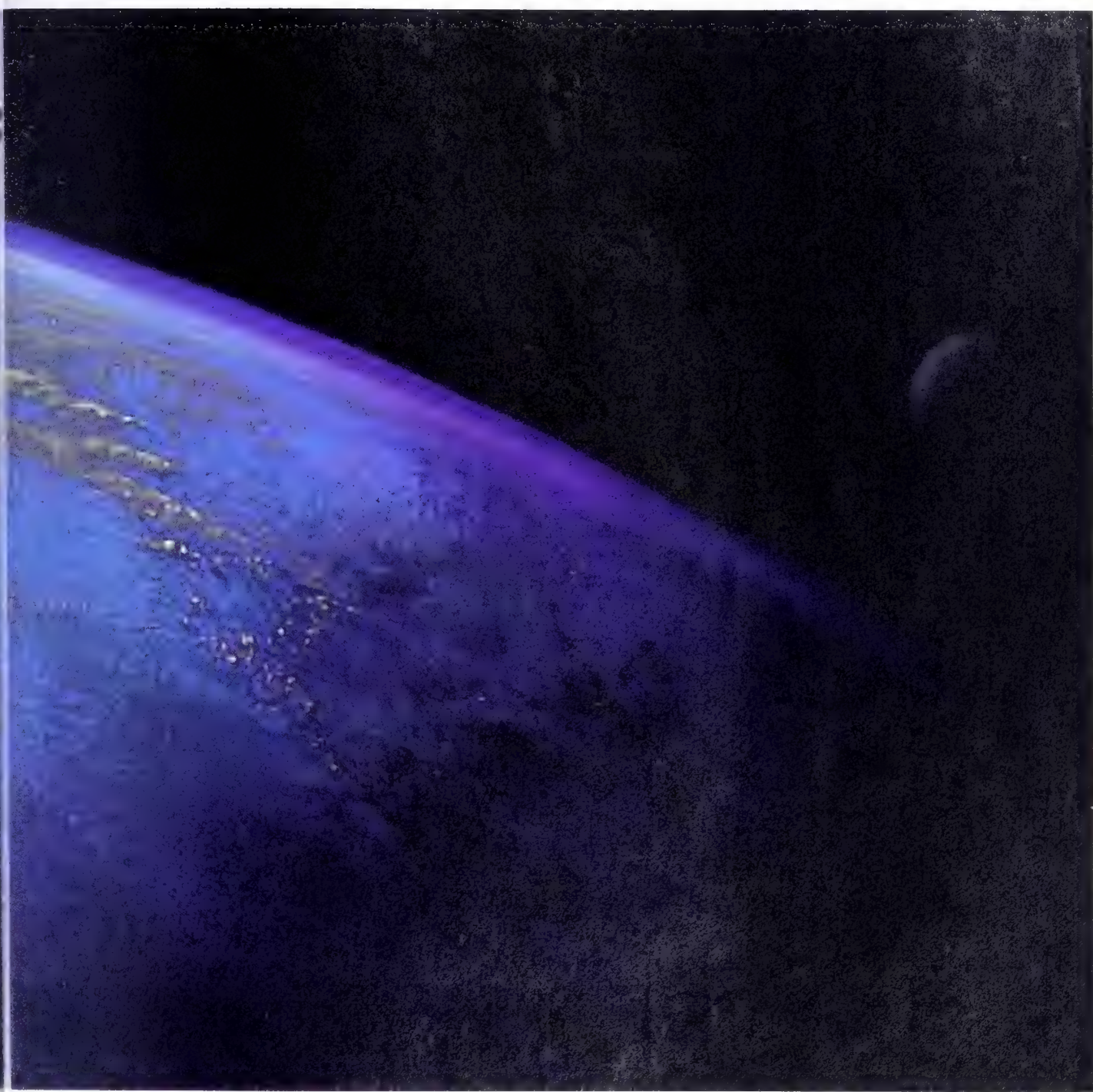
VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS 1989 EST \$	ESTIMATES VARI- ATION %	
35	62/28	76	NM	5.09	NM	-33	50	106	29.2	12	3.18b	0.06	3.09	14.4	Fuel B
52	52/38	231	23	1.32	30	6	54	73	95.6	12	1.82	2.26	2.40	9.6	Leisure B
45	48/32	197	13	2.48	32	19	70	82	76.2	01	2.41	3.45	3.91	5.7	Retailing
35	48/32	1103	34	0.14	5	3	NA	105	14.3	12	0.83	1.03	1.44	12.1	Metals C
59	66/53	111	9	0.00	0	-1	95	62	18.9	12	6.50b	6.32	5.17	9.3	Nonbank fin. B
24	26/15	782	25	1.49	38	0	36	150	89.5	06	0.61	0.96	1.38	5.8	Health care B
67	71/50	163	7	4.45	33	19	69	53	58.3	12	0.52	9.20	10.36	3.5	Banks D
49	49/29	222	14	1.46	20	69	64	71	173.9	12	-0.71	3.62	3.91	4.4	Health care C
59	62/39	114	7	0.00	0	44	83	59	187.4	12	3.28	7.92	7.57	15.8	Transportation A
17	17/9	71	8	1.19	10	76	69	205	54.8	12	1.74	2.01	2.20	4.5	Utilities A
32	34/24	105	NM	3.88	DEF	14	79	107	101.4	12	2.78	-0.33	3.89	16.4	Transportation B
89	91/59	112	10	3.16	31	42	39	38	47.4	12	7.75	9.13	9.10	7.3	Aerospace
25	30/24	219	12	1.94	23	-6	53	137	49.1	12	1.65	2.10	2.38	5.4	Housing A
94	94/72	583	18	0.85	15	14	70	36	72.3	12	4.14	5.34	6.50	2.3	Nonbank fin. A
31	35/26	469	16	0.79	12	4	33	111	51.2	12	1.67	1.95	2.32	1.9	Leisure C
35	49/32	NEG	14	2.46	35	-10	42	97	163.1	12	2.00	2.45	2.82	2.1	Consumer D
32	32/23	262	NA	3.78	NA	22	4	106	11.0	12	NA	-2.58	0.61	55.98	Fuel B
43	48/40	264	14	2.44	35	-2	71	78	50.0	12	2.53	3.00	3.49	4.6	Office equipment A
41	41/30	95	5	5.07	26	12	71	81	114.8	12	0.02	8.09	7.92	6.7	Banks A
21	25/14	685	23	0.00	0	5	25	157	49.2	12	2.19	0.93	0.88	33.9	Transportation B
32	38/30	211	19	3.01	58	-5	46	103	82.8	12	2.20	1.66	2.09	5.3	Conglomerates
26	29/20	113	15	2.51	39	19	59	128	82.9	12	0.86	1.65	2.98	8.7	Nonbank fin. A
25	28/22	167	10	3.64	35	-1	45	129	31.5	12	1.98	2.61	2.98	1.4	Banks B
27	33/27	93	8	10.91	82	-3	60	118	70.8	12	3.74	3.62d	3.35	8.6	Utilities A
30	37/25	152	37	3.32	123	-7	68	106	80.0	12	0.45	0.81	1.39	20.6	Fuel C
66	76/48	362	17	3.03	52	15	54	49	136.4	12	3.27	3.83	†	†	Publishing/TV B
47	50/40	318	21	3.18	67	4	53	69	66.7	12	0.01	2.22	3.81	4.8	Consumer D
10	12/9	791	28	1.03	29	-7	3	322	10.4	12	0.27	0.35	NA	NM	Food C
50	61/43	186	11	3.31	37	14	59	64	146.0	01	3.81	4.47	5.02	2.4	Retailing
38	42/34	195	16	4.62	75	5	34	82	24.5	12	2.24	2.34	2.84	7.7	Utilities B
36	36/20	164	12	2.78	34	53	52	86	56.2	12	2.03	2.90	3.22	3.0	Banks C
31	37/29	313	13	2.35	31	-4	31	101	22.1	12	2.10	2.35	1.94	4.9	Publishing/TV B
35	35/24	74	3	6.79	20	37	71	88	110.5	12	-11.56	11.55	6.98	14.0	Banks A
43	44/29	292	NM	1.41	DEF	40	40	72	221.8	12	1.88	-0.34	2.25	16.5	Leisure D
20	21/17	115	16	9.80	161	17	20	153	52.3	12	2.40	1.22	2.33	9.5	Utilities A
38	57/35	177	9	1.91	18	-22	74	81	142.3	12	2.96	4.05	3.89	11.9	Electrical D
41	43/34	259	15	2.17	32	-6	43	75	37.6	12	1.80	2.78	3.12	2.4	Publishing/TV B
84	85/70	234	NM	3.59	DEF	18	53	36	61.0	12	0.72	-5.22	4.18	17.4	Fuel B
34	36/25	193	10	2.36	25	20	55	89	68.2	12	2.05	3.25	2.55	14.7	Manufacturing A
36	40/24	497	28	0.00	0	24	56	84	93.1	03	1.29	1.88d	2.47	4.3	Office equipment C
41	43/34	163	8	1.96	15	6	67	73	62.1	12	3.06	5.23	4.44	5.3	Paper B
31	38/30	92	7	3.20	21	-5	69	95	81.9	12	4.03	4.80	5.23	5.7	Paper B
36	36/25	139	24	1.66	40	20	55	82	76.4	12	2.73	1.51	2.68	15.9	Fuel B
55	63/40	145	6	1.83	11	31	75	54	140.8	12	3.95	9.01	9.14	9.4	Metals A
24	24/20	269	13	1.97	25	2	39	121	32.2	12	1.57	1.91	2.12	5.0	Chemicals

TO TABLES APPEAR ON PAGES 218-219

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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
196 R. R. DONNELLEY & SONS	2923	185	2878	16	205.3	-6	7.1	8.8	14.9	15.8	2346	5
197 CAROLINA POWER & LIGHT	2893	194	2273	9	196.8	-44	8.7	16.8	6.8	7.1	7504	0
198 CENTRAL & SOUTH WEST	2854	178	2512	3	356.0	-11	14.2	16.5	10.4	12.5	8110	3
199 ARCO CHEMICAL	2844	167	2700	38	494.0	92	18.3	13.2	33.4	37.5	2548	1
200 MERRILL LYNCH	2842	205	10547y	7	463.2	25	4.4	3.8	NA	13.3	62457	5
201 AFFILIATED PUBLICATIONS	2835	255	534	9	-80.9	NM	NM	29.2	NM	-34.4	425	-20
202 GENUINE PARTS	2824	176	2942	13	181.4	22	6.2	5.7	NA	21.9	1141	11
203 COOPER INDUSTRIES	2794	179	4258y	19	224.4	29	5.3	4.8	9.8	13.2	4384	15
204 FLEET/NORSTAR FINANCIAL GROUP	2793	241	3051	13	335.8	68	11.0	7.4	NA	18.9	29052	11
205 CHEMICAL WASTE MANAGEMENT	2776	191	700	25	116.9	35	16.7	15.5	NA	22.3	876	45
206 DELTA AIR LINES	2755	232	7323	15	344.5	48	4.7	3.7	12.9	14.5	5816	8
207 LOCKHEED	2752	197	10590	-6	442.0	4	4.2	3.8	NA	18.5	6643	3
208 WASHINGTON POST	2748	188	1368	4	269.1	44	19.7	14.2	28.4	32.4	1422	19
209 HUMANA	2747	220	3580	17	231.6	20	6.5	6.3	13.7	19.8	3529	7
210 HONEYWELL	2712	187	7148	7	-434.9	NM	NM	3.8	NM	-25.1	5089	-6
211 NEWMONT MINING	2710	247	500	38	96.7	-69	19.3	85.6	NA	-29.2	1715	-60
212 GOODYEAR TIRE & RUBBER	2692	147	10810	9	350.1	-32	3.2	5.2	10.2	17.3	8618	3
213 SUNTRUST BANKS	2678	182	2889	13	308.7	9	10.7	11.0	18.9	16.4	29177	8
214 TEXAS EASTERN	2676	350	3481	-4	166.9	74	4.8	2.7	8.2	12.4	4869	0
215 COMPAQ COMPUTER	2674	306	2066	69	255.2	87	12.4	11.1	24.6	31.3	1590	76
216 AUTOMATIC DATA PROCESSING	2673	157	1617y	10	178.2	19	11.0	10.2	16.6	19.4	1593	-1
217 CHUBB	2662	225	3981y	7	372.6	8	9.4	9.3	NA	16.5	9741	13
218 TRW	2656	171	6982	2	261.0	7	3.7	3.6	14.0	16.6	4442	1
219 CENTEL	2655	269	1095	2	109.8	-18	10.0	12.6	9.4	11.9	3753	37
220 UST	2640	334	619x	7	162.2	24	26.2	22.7	35.4	36.8	598	9
221 PENNSYLVANIA POWER & LIGHT	2634	202	2214	6	332.0	10	15.0	14.5	9.3	13.7	7525	1
222 NORDSTROM	2607	272	2328	21	123.3	33	5.3	4.8	16.1	20.7	1512	22
223 HILTON HOTELS	2607	258	954y	13	130.9	-6	13.7	16.6	14.4	16.6	1893	33
224 ALBERTSON'S	2594	297	6773	15	162.5	30	2.4	2.1	18.2	21.5	1594	14
225 W. R. GRACE	2589	242	5786	28	192.1	35	3.3	3.1	8.6	13.2	5171	23
226 USF&G	2578	211	5582	16	305.7	-18	5.5	7.7	14.8	16.0	12361	22
227 UAL	2574	106	8982	8	599.9	NM	6.7	NM	25.3	50.0	6593	-23
228 DETROIT EDISON	2568	278	3102	9	-235.3	NM	NM	19.4	2.0	-10.3	10811	-1
229 TRANSAMERICA	2567	196	7879y	8	346.4	-1	4.4	4.8	10.5	12.8	26759	15
230 EMHART	2566	376	2763	13	126.6	19	4.6	4.3	10.1	14.0	2427	20
231 HIMONT	2541	207	1711a	47	372.9	64	21.8	19.5	26.9	27.5	1905	26
232 PACIFIC ENTERPRISES	2530	183	5932	10	229.3	-1	3.9	4.3	NA	11.8	6866	34
233 MICROSOFT	2513	175	719	57	151.4	63	21.1	20.4	NA	32.5	605	47
234 FEDERAL EXPRESS	2495	249	4244	21	192.0	9	4.5	5.0	10.7	13.7	3145	13
235 DRESSER INDUSTRIES	2488	245	3989	25	135.7	233	3.4	1.3	9.4	9.0	2899	1
236 MORGAN STANLEY GROUP	2476	377	4109y	31	394.6	71	9.6	7.3	69.9	31.7	40527	7
237 CONAGRA	2472	275	10341	12	171.7	16	1.7	1.6	15.8	19.2	3994	36
238 FIRST CHICAGO	2415	386	4816	14	513.1	NM	10.7	NM	NA	26.4	44432	1
239 UNION ELECTRIC	2413	234	2029	4	291.6	-13	14.4	17.2	9.3	13.8	5827	-2
240 MARTIN MARIETTA	2370	216	5727	11	319.8	39	5.6	4.5	20.5	26.6	3319	18

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VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES 1989 EST \$ VARI- ATION %		
38	39/32	225	14	2.34	33	4	60	78	34.2	12	2.80	2.64	2.91	1.7	Services D
36	38/32	126	18	7.89	139	8	37	80	45.2	12	3.90	2.04	3.95	2.4	Utilities A
30	34/30	110	9	8.60	76	2	51	94	44.5	12	3.92	3.43	3.83	7.1	Utilities A
30	38/26	216	6	3.38	20	2	15	96	30.9	12	NA	5.00	5.32	4.7	Chemicals
28	32/22	85	7	3.57	24	19	46	102	68.7	12	3.51b	4.21	2.55	8.0	Nonbank fin. A
41	45/24	1205	55	0.54	29	40	26	69	32.8	12	2.04	0.75	0.86	6.8	Publishing/TV B
37	41/33	340	16	2.85	44	-4	56	77	35.0	12	1.88	2.35	2.62	2.1	Services B
55	63/50	165	13	3.63	45	-2	58	51	56.2	12	3.47	4.41	5.04	2.7	Electrical A
26	28/22	161	9	4.92	43	12	36	107	30.2	12	1.82b	3.01	3.40	2.4	Banks A
28	29/21	529	24	0.58	14	3	14	100	19.3	12	0.87	1.17	1.45	3.2	Services C
56	60/45	116	9	2.14	19	14	71	49	123.5	06	5.90	6.30	6.76	12.5	Transportation A
46	50/39	115	6	3.45	22	16	78	59	103.6	12	6.64	7.34	6.49	5.1	Aerospace
214	229/187	331	10	0.86	9	-2	51	13	18.1	12	14.52	20.91	14.31	2.7	Publishing/TV B
28	29/21	234	12	3.29	40	26	64	98	61.2	08	1.86	2.30	2.54	1.9	Health care C
63	76/57	157	NM	3.34	DEF	2	73	43	98.3	12	5.75	-10.22	6.23	7.3	Electrical C
40	47/32	NEG	28	1.49	42	27	30	67	51.2	12	5.25	1.44	1.60	40.2	Metals C
47	68/47	133	8	3.84	29	-16	64	57	119.7	12	8.49	6.11	7.26	7.9	Automotive C
21	25/20	142	9	3.66	32	-6	43	129	26.7	12	2.17	2.38	2.64	1.6	Banks C
50	53/24	198	16	2.00	32	84	54	53	171.5	12	1.80	3.13	2.12	19.9	Utilities B
69	76/47	328	11	0.00	0	38	69	39	330.1	12	3.57b	6.27	7.34	6.5	Office equipment B
36	47/35	291	16	1.44	24	-19	63	74	77.9	06	1.76	2.20	2.49	1.3	Office equipment C
66	66/51	118	7	3.30	24	5	70	41	64.2	12	8.29	8.85	8.58	6.6	Nonbank fin. B
44	54/41	170	10	3.90	41	-7	75	60	42.5	12	3.95b	4.23	4.39	6.7	Conglomerates
67	67/41	292	26	2.74	71	53	50	39	65.1	12	3.55	2.60	2.56	21.6	Telecomms. B
24	24/14	600	17	3.83	65	45	51	110	54.8	12	1.13	1.41	1.68	3.0	Consumer E
35	38/34	128	9	7.89	74	3	30	75	35.0	12	3.32	3.73	3.66	4.9	Utilities A
32	34/22	437	21	0.88	19	28	34	81	81.8	01	1.13	1.51	1.80	5.1	Retailing
55	55/42	330	20	1.83	37	17	44	48	57.9	12	2.80	2.72	3.01	3.4	Leisure C
39	43/28	344	16	1.45	23	46	42	67	40.9	01	1.88	2.44	2.75	5.6	Food C
31	31/24	179	11	4.59	52	1	64	85	61.6	12	1.67b	2.69d	2.62	5.0	Chemicals
31	34/29	142	9	8.41	74	4	45	82	131.8	12	4.92	3.57	3.11	9.6	Nonbank fin. B
120	128/75	215	6	0.00	0	58	85	22	267.8	12	-0.08	20.20	16.29	21.5	Transportation A
18	19/12	93	NM	9.60	DEF	34	25	147	55.6	12	3.25	-1.94	2.12	9.9	Utilities A
34	37/30	99	8	5.51	43	4	47	75	44.5	12	4.51	4.42	4.38	6.3	Nonbank fin. A
41	41/19	286	20	2.14	44	91	56	62	64.6	12	1.70	2.02	2.28	2.3	Manufacturing A
39	47/33	187	7	3.57	25	16	12	65	27.9	10	3.77	5.71	5.56	11.6	Chemicals
40	50/36	138	11	8.75	99	-12	19	64	40.1	12	3.69	3.51	2.93	13.5	Utilities B
47	71/45	540	21	0.00	0	0	18	54	222.1	06	1.30	2.22	3.06	6.6	Office equipment C
48	56/39	178	12	0.00	0	13	71	52	84.7	05	3.56	3.88d	4.56	9.4	Transportation C
37	37/25	165	21	2.16	45	24	76	67	81.5	10	0.22	1.78	2.38	8.6	Manufacturing C
70	70/37	207	7	1.30	9	59	35	36	45.6	12	5.99	10.26	8.29	21.6	Nonbank fin. A
31	34/24	279	13	2.49	32	18	38	80	39.0	05	1.94	2.41d	2.77	3.8	Food B
39	39/23	132	5	4.65	22	58	71	62	96.9	12	-10.71	8.20	6.71	3.7	Banks B
24	25/22	127	9	8.47	78	4	38	102	53.9	12	2.91	2.56	2.58	7.0	Utilities A
45	48/38	197	7	2.45	18	-5	54	53	51.2	12	4.25	6.02	5.74	4.0	Aerospace

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THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS		
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %			
241	UNION CAMP	2367	214	2661	13	295.1	42	11.1	8.8	NA	19.8	3094	6
242	JAMES RIVER CORP. OF VIRGINIA	2351	274	5623	15	239.8	23	4.3	4.0	7.8	11.3	5402	11
243	ASHLAND OIL	2349	290	7952	8	239.6	64	3.0	2.0	14.5	20.0	4322	6
244	CONSOLIDATED RAIL	2347	252	3490	7	306.0	15	8.8	8.2	NA	7.7	7224	6
245	FIRST WACHOVIA	2337	284	2020	13	244.3	38	12.1	9.8	23.4	15.7	21815	13
246	KNIGHT-RIDDER	2337	223	2083	6	146.8	-1	7.0	7.6	10.6	16.5	2357	23
247	BALTIMORE GAS & ELECTRIC	2329	228	1864	3	303.4	1	16.3	16.6	10.1	14.5	5126	7
248	AIR PRODUCTS & CHEMICALS	2326	210	2487	14	219.5	22	8.8	8.2	13.3	16.5	3136	13
249	HERSHEY FOODS	2322	229	2168	16	144.5	16	6.7	6.7	13.0	14.9	1765	14
249	TEXTRON	2315	265	7286	2	272.1	4	3.7	3.6	9.2	11.7	12554	10
251	MEAD	2305	230	4464	6	364.1	67	8.2	5.2	18.4	23.8	3541	21
252	FIRST UNION	2260	250	2899	10	296.9	5	10.2	10.8	NA	15.8	28978	5
253	VF	2252	256	2516	-2	173.7	-3	6.9	7.0	14.8	16.3	1760	-10
254	DELUXE	2252	240	1196	26	143.4	-3	12.0	15.7	26.5	26.5	786	-9
255	FREEPORT-McMORAN	2247	296	1945	28	310.1	25	15.9	16.4	NA	NA	3730	19
256	CENTERIOR ENERGY	2236	248	2038	6	-32.6	NM	NM	24.7	NM	-3.7	12047	6
257	GENERAL DYNAMICS	2225	236	9551	1	379.0	-13	4.0	4.6	14.9	19.7	6118	10
258	ROHM & HAAS	2204	251	2535	15	230.1	18	9.1	8.9	16.8	19.1	2242	15
259	GREAT NORTHERN NEKOOSA	2188	231	3588	39	341.7	70	9.5	7.7	15.2	22.3	3821	8
260	HOUSEHOLD INTERNATIONAL	2186	294	1278	19	183.7	12	14.4	15.3	9.6	15.5	21032	26
261	GENERAL PUBLIC UTILITIES	2161	283	2834	6	313.8	8	11.1	10.8	10.0	14.0	6415	2
262	WALGREEN	2145	282	4980	12	135.0	24	2.7	2.5	16.3	18.6	1634	7
263	ST. PAUL	2144	267	3631	8	349.3	8	9.6	9.6	NA	17.3	10382	17
264	COCA-COLA ENTERPRISES	2143	253	3874	16	152.6	73	3.9	2.7	7.1	9.2	4669	-2
265	HERCULES	2132	215	2802	4	120.4	-85	4.3	30.5	6.3	5.9	3325	-5
266	FIRST INTERSTATE BANCORP	2119	268	5932	17	102.4	NM	1.7	NM	-2.3	4.8	58194	14
267	MORTON THIOKOL	2113	270	2461	14	159.7	5	6.5	7.0	13.6	14.1	2028	13
268	VIACOM	2108	392	1259	25	-123.1	NM	NM	NM	NM	-51.3	3980	1
269	EATON	2104	271	3469	11	227.7	10	6.6	6.6	15.1	NA	3034	-2
270	NEW YORK TIMES	2080	212	1700	4	161.0	3	9.5	9.5	14.2	18.4	1915	12
271	SAN DIEGO GAS & ELECTRIC	2068	311	2076	9	189.4	6	9.1	9.4	9.9	14.4	3533	-1
272	AMAX	2047	302	3944x	17	740.9	862	18.8	2.3	NM	53.5	4076	3
273	NORTHEAST UTILITIES	2038	254	2079	11	263.4	4	12.7	13.5	7.9	12.2	6765	2
274	LINCOLN NATIONAL	2025	279	7312	5	185.3	-22	2.5	3.4	NM	8.6	20663	13
275	NATIONAL MEDICAL ENTERPRISES	2021	337	3433y	15	174.4	11	5.1	5.3	9.8	16.8	3642	10
276	SOUTHERN NEW ENGLAND TELECOMMS.	2018	360	1583y	6	155.4	11	9.8	9.4	10.5	13.7	3073	13
277	GREAT WESTERN FINANCIAL	2018	322	3165y	11	248.4	17	7.9	7.4	6.8	12.7	32815	15
278	CMS ENERGY	2016	374	2943	6	296.3	-8	10.1	11.5	NA	17.1	8305	4
279	RYDER SYSTEM	2008	222	5030	9	134.6	-28	2.7	4.1	7.4	8.6	6039	5
280	BECTON, DICKINSON	1989	233	1823	14	157.2	19	8.6	8.2	13.1	15.3	2166	12
281	KERR-McGEE	1981	301	2743	5	110.1	31	4.0	3.2	NA	7.9	3123	0
282	RUBBERMAID	1977	310	1194	18	99.3	17	8.3	8.3	18.9	19.4	782	9
283	SOVRAN FINANCIAL	1975	295	2230	10	243.1	12	10.9	10.8	20.7	17.0	22484	7
284	BAKER HUGHES	1971	262	2336	16	58.1	NM	2.5	NM	6.6	5.3	2100	-3
285	BARNETT BANKS	1965	285	2546	14	226.4	22	8.9	8.3	NA	15.5	25748	10

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P. 180

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST 1989 \$	ESTIMATES VARI- ATION %	
34	38/31	159	8	3.61	29	3	69	69	56.5	12	2.83	4.25	4.81	6.0	Paper B
29	30/21	121	12	1.66	20	14	69	81	58.4	04	2.36	2.85d	3.24	7.8	Paper B
40	40/30	196	12	2.49	30	19	39	59	59.9	09	2.14	3.29	4.29	11.3	Fuel B
34	37/26	59	8	3.50	27	10	78	69	80.9	12	3.88	4.44	4.69	3.5	Transportation B
41	42/36	150	10	3.73	36	6	47	57	25.6	12	3.11b	4.22	4.66	2.1	Banks C
44	49/37	263	17	2.77	47	9	60	53	54.1	12	2.65	2.59	3.07	4.8	Publishing/TV B
29	34/29	124	8	6.81	58	3	36	79	41.7	12	3.47	3.47	3.43	2.7	Utilities A
42	53/38	174	11	2.83	31	-4	71	55	83.9	09	2.83	3.90	4.30	3.4	Chemicals
26	29/22	239	16	2.72	44	-2	20	90	51.3	12	1.64	1.60	1.95	2.8	Food B
27	30/22	101	9	3.67	32	14	48	85	77.6	12	2.97	3.10	3.18	7.0	Conglomerates
37	50/31	151	7	2.08	14	9	64	63	145.3	12	3.47	5.54	3.82	13.2	Paper B
21	24/19	120	8	4.73	36	9	40	107	47.0	12	2.55	2.76	2.97	3.3	Banks C
33	34/27	211	13	2.67	35	-2	71	68	56.6	12	2.65	2.55	2.81	6.6	Consumer A
26	28/21	416	16	3.49	55	-3	51	85	45.1	12	1.74	1.68	1.92	2.2	Office equipment A
33	35/23	306	8	4.53	36	31	62	68	51.9	12	3.38	4.13	2.70	8.0	Chemicals
16	17/12	81	NM	10.08	DEF	10	17	141	57.2	12	2.82	-0.73	1.85	19.8	Utilities A
53	59/49	116	6	1.87	11	-1	46	42	57.2	12	10.26	9.03	8.89	5.9	Aerospace
33	38/30	183	10	3.38	32	8	62	67	26.0	12	2.85	3.46	3.84	3.7	Chemicals
40	47/35	143	6	2.80	18	-5	68	55	99.5	12	3.68	6.21	7.01	6.9	Paper B
63	65/50	197	13	3.38	45	29	62	35	61.8	12	5.32b	4.78	6.36	13.7	Conglomerates
37	39/31	107	8	4.83	38	24	62	58	52.4	12	4.12	4.75	4.94	3.2	Utilities A
35	40/27	295	17	1.95	32	12	45	62	63.4	08	1.68	2.10	2.52	3.4	Health care A
46	49/38	106	6	4.32	28	7	86	46	112.2	12	6.76	7.26	6.45	6.6	Nonbank fin. B
16	17/13	138	16	0.31	5	2	40	133	40.7	12	0.63	1.03	0.84	14.5	Consumer C
47	54/43	104	18	4.82	88	0	61	46	80.5	12	14.74	2.55	4.28	6.2	Chemicals
46	54/41	109	23	6.30	144	6	80	46	47.2	12	-11.99	2.03	7.73	9.0	Banks D
44	46/36	187	13	2.07	28	-2	64	48	55.9	06	2.90	3.33	3.52	1.5	Chemicals
40	40/21	572	NM	0.00	0	63	11	53	9.4	12	-3.37b	-3.54	-2.13	41.6	Publishing/TV A
57	60/47	196	9	3.52	33	18	61	37	53.0	12	4.79b	6.11	6.52	6.3	Automotive B
26	33/24	238	13	1.83	24	-12	47	79	49.0	12	1.96	2.00	2.17	4.1	Publishing/TV B
37	40/31	168	12	7.03	82	21	23	56	50.7	12	2.96	3.18	3.24	1.8	Utilities A
24	27/17	148	3	1.65	5	41	57	84	98.4	12	0.82	8.42	4.93	14.1	Metals A
19	22/18	111	9	9.39	85	1	37	109	48.5	12	1.97	2.07	2.16	6.6	Utilities A
49	54/42	101	12	5.09	60	9	59	42	35.9	12	5.15	4.12	5.19	13.4	Nonbank fin. B
28	28/19	195	12	2.47	29	33	59	73	62.7	05	2.29	2.34d	2.63	3.7	Health care C
65	68/47	178	13	4.83	63	30	30	31	31.1	12	4.54	4.99	5.49	5.5	Telecomms. B
16	18/13	103	8	4.83	39	8	80	128	76.0	12	1.67	1.95	2.19	4.6	Nonbank fin. C
25	27/16	127	7	0.00	0	42	59	82	59.3	12	2.19	3.31	3.37	10.4	Utilities A
25	33/23	135	16	2.22	35	-13	77	80	83.0	12	2.29	1.61	2.64	8.3	Transportation C
51	62/47	202	14	1.98	27	-10	63	39	75.6	09	3.42	3.69	4.59	3.4	Health care D
41	45/33	141	18	2.68	48	18	64	48	100.7	12	1.73	2.27	2.40	8.9	Fuel B
27	29/21	387	20	1.64	33	10	47	74	33.5	12	1.15	1.35	1.56	1.6	Manufacturing A
34	36/30	139	8	4.52	37	0	34	59	51.8	12	3.67	4.09	4.49	2.0	Banks C
17	20/12	203	37	2.77	102	-6	69	119	71.8	09	-2.22	0.45	0.65	21.3	Fuel C
33	37/29	134	9	3.18	28	-5	58	60	39.3	12	3.26	3.75	4.23	1.7	Banks C

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THE TOP 1000

		MARKET VALUE		SALES		PROFITS						ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
								12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
286	CHEMICAL BANKING	1958	389	7644	13	753.6	NM	9.9	NM	25.5	22.6	67349	-14
287	NATIONAL CITY	1943	428	2227	12	233.2	80	10.5	6.5	22.3	17.6	21623	8
288	INGERSOLL-RAND	1943	261	3021	14	161.6	50	5.3	4.1	11.4	13.0	2483	10
289	GEICO	1930	286	1757	8	134.4	-10	7.7	9.3	16.6	20.1	3061	2
290	SYSCO	1925	370	5561	39	96.8	44	1.7	1.7	9.5	16.3	1835	89
291	NORTHERN STATES POWER	1923	281	2006	13	214.8	5	10.7	11.6	9.4	13.6	4496	2
292	INTL. FLAVORS & FRAGRANCES	1915	293	840	13	128.7	20	15.3	14.3	20.0	19.3	882	1
293	LITTON INDUSTRIES	1904	259	4943	4	172.8	14	3.5	3.2	9.9	14.6	4950	2
294	COLUMBIA PICTURES ENTERTAINMENT††	1896	NR	1170	NA	6.8	NA	0.6	NA	NM	NA	3535	3
295	BOISE CASCADE	1892	257	4095	7	289.1	58	7.1	4.8	13.4	17.1	3610	6
296	ALLEGHENY POWER SYSTEM	1890	287	2170	10	223.6	-1	10.3	11.4	9.4	13.6	4323	1
297	COMTEL CELLULAR	1888	NR	35a	NA	2.6	NA	7.4	NA	1.0	2.0	173	NA
298	DOVER	1874	264	1954	23	145.8	31	7.5	7.0	21.2	20.3	1366	18
299	SHAWMUT NATIONAL	1858	318	2811	19	242.6	53	8.6	6.7	23.6	15.0	28414	7
300	POTOMAC ELECTRIC POWER	1854	266	1350	1	211.1	1	15.6	15.6	9.7	16.2	4146	12
301	NBD BANCORP	1848	330	2181	11	227.2	40	10.4	8.2	19.8	15.1	24176	4
302	CITIZENS UTILITIES	1842	382	300a	9	74.2	16	24.8	23.3	12.5	16.2	1013	7
303	FLUOR	1838	369	5514	36	69.0	NM	1.3	NM	12.1	11.5	2073	1
304	BETHLEHEM STEEL	1837	375	5489	19	391.6	277	7.1	2.2	NM	25.1	4449	-7
305	WHIRLPOOL	1836	298	4421	5	161.3	-14	3.6	4.4	12.2	12.2	3410	9
306	GREAT ATLANTIC & PACIFIC TEA	1830	384	9868	2	122.3	24	1.2	1.0	11.9	13.0	2337	4
307	COASTAL	1829	425	8237	11	157.4	39	1.9	1.5	10.0	12.3	7640	-1
308	WESTVACO	1828	280	2187	11	211.4	29	9.7	8.4	12.4	16.0	2634	18
309	NWA	1824	410	5650	10	135.1	31	2.4	2.0	6.9	8.4	4372	2
310	TANDEM COMPUTERS	1816	309	1425	31	102.1	0	7.2	9.3	NA	11.4	1329	25
311	AON	1815	332	2732	11	204.4	10	7.5	7.5	14.3	16.7	8266	17
312	MANUFACTURERS HANOVER	1809	391	8545	10	752.0	NM	8.8	NM	NA	26.6	66710	-9
313	AMDAHL	1807	307	1802	20	213.8	51	11.9	9.4	20.1	21.2	1931	28
314	ARKLA	1804	336	1996	4	124.8	8	6.3	6.0	NA	16.7	3040	29
315	PRICE	1803	292	4338y	24	102.8	26	2.4	2.3	14.8	19.7	1226	28
316	STONE CONTAINER	1799	303	3742	16	341.8	112	9.1	5.0	21.8	35.6	2395	5
317	SHEARSON LEHMAN HUTTON	1796	319	10529y	56	96.5	-4	0.9	1.5	63.9	5.5	84800	27
318	WINN-DIXIE STORES	1787	326	9088	3	128.3	12	1.4	1.3	17.2	17.2	1631	6
319	ENRON	1783	328	5708	-4	130.2	143	2.3	0.9	NA	6.8	8700	-7
320	ILLINOIS TOOL WORKS	1775	288	1930	14	140.0	32	7.3	6.3	16.0	18.8	1380	3
321	BURLINGTON NORTHERN	1771	93	4700	11	207.2	16	4.4	4.2	10.3	22.5	6330	-29
322	SUPER VALU STORES	1768	344	10025	7	129.5	19	1.3	1.2	13.0	17.3	2383	14
323	ALLTEL	1766	493	1068	8	125.0	2	11.7	12.3	11.2	15.7	2153	0
324	VULCAN MATERIALS	1753	349	1053	14	136.0	19	12.9	12.4	20.2	21.8	960	2
325	BROWN-FORMAN	1749	365	1048	-5	142.2	32	13.6	9.8	22.1	29.0	1008	-9
326	TORCHMARK	1745	300	1670	5	185.2	-8	11.1	12.6	15.5	21.4	4428	3
327	CONTINENTAL CORP.	1745	243	5878	1	124.0	-62	2.1	5.7	NA	5.0	13302	8
328	AVON PRODUCTS	1742	342	3063	18	121.1	-47	4.0	8.8	16.1	46.6	2460	-2
329	CRAY RESEARCH	1740	221	756	10	156.6	7	20.7	21.4	20.4	22.9	991	10
330	HOME DEPOT	1739	427	2000	38	76.8	42	3.8	3.7	17.0	20.0	699	32

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT. MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST 1989 \$	ESTIMATES VARI- ATION %	
34	34/21	64	3	8.03	23	36	61	58	117.1	12	-16.68b	12.02	7.29	14.0	Banks A
32	34/28	147	8	5.23	44	17	57	61	39.4	12	2.31b	3.84	4.34	3.5	Banks B
38	45/31	162	13	2.75	35	-1	67	51	81.7	12	1.98	3.00	3.67	5.3	Manufacturing C
125	132/104	289	15	1.31	19	23	76	15	10.8	12	9.01	8.48	9.59	6.2	Nonbank fin. B
43	43/28	325	24	0.85	20	31	49	45	48.2	06	1.40	1.79	2.33	2.1	Food A
31	34/29	135	10	6.89	68	7	42	63	53.1	12	3.01	3.11	3.24	2.9	Utilities A
51	55/44	287	15	3.80	56	2	54	38	52.3	12	2.83	3.40	3.86	1.2	Consumer D
77	87/68	162	12	0.00	0	-10	71	25	54.2	07	5.16	6.33	7.13	0.8	Electrical B
17	17/7	198	NM	0.00	0	135	17	111	73.1	02	NA	-0.09d	0.24	89.8	Leisure B
42	50/39	113	7	3.32	22	-10	70	45	71.8	12	3.70	6.34	6.64	3.9	Paper A
36	40/36	125	9	8.47	78	4	41	52	58.7	12	4.05	3.96	3.97	2.4	Utilities A
38	38/14	1443	475	0.00	NA	NA	10	50	32.0	12	0.03	0.08c	0.27	24.0	Telecomms. A
29	37/27	260	13	2.39	31	-5	47	66	49.4	12	1.66	2.22	2.49	3.6	Manufacturing C
25	28/21	116	8	5.50	41	7	51	75	99.5	12	2.20	3.28	3.72	2.3	Banks A
20	23/19	148	9	7.44	68	-9	24	94	38.6	12	2.11	2.14	2.13	5.2	Utilities A
39	41/33	123	8	3.81	32	15	44	48	36.7	12	3.32b	4.59	5.04	2.8	Banks B
42	44/28	403	25	0.00	0	32	8	44	13.8	12	1.48	1.68d	1.78	4.3	Telecomms. A
23	25/17	305	33	0.09	3	31	61	79	98.1	10	-0.95	0.71	1.16	12.5	Services A
25	29/18	126	5	0.00	0	23	70	75	162.3	12	1.48	5.16	6.16	23.4	Metals B
27	30/24	139	11	4.15	47	-1	76	69	47.8	12	2.53	2.33	2.64	9.5	Consumer B
48	52/34	194	18	1.25	22	25	32	38	39.2	02	2.71	3.39d	4.02	5.0	Food C
33	37/26	152	12	1.21	15	16	59	55	70.3	12	2.10	2.70	3.22	6.4	Fuel B
28	32/25	139	9	3.26	30	-5	46	65	24.8	10	2.25	3.10	3.49	5.1	Paper B
63	73/38	114	14	1.44	19	63	92	29	180.5	12	3.59	4.63	5.12	17.6	Transportation A
19	22/12	202	20	0.00	0	-8	72	97	139.2	09	1.08	0.96	1.31	7.7	Office equipment B
29	29/23	148	9	4.47	40	14	54	63	22.6	12	2.80	3.18	3.50	2.0	Nonbank fin. B
35	35/24	68	2	9.27	23	38	48	51	91.7	12	-27.04	14.24	7.19	17.9	Banks A
17	28/16	179	9	0.59	5	11	48	106	132.8	12	1.37	1.99	2.27	5.1	Office equipment B
21	22/18	258	15	5.05	78	19	66	84	44.5	12	1.25	1.39	1.57	8.0	Utilities B
37	42/34	346	19	0.00	0	-8	53	49	102.3	08	1.50	1.93	2.34	3.9	Retailing
30	40/26	188	5	2.40	13	20	55	60	131.1	12	2.81	5.69	6.15	8.6	Containers B
21	25/17	137	25	3.64	93	6	77	87	20.1	12	1.00	0.81	2.40	12.9	Nonbank fin. A
45	47/38	239	16	4.30	67	8	20	40	15.4	06	2.72	2.87	3.20	2.5	Food C
38	43/35	130	19	6.59	125	5	49	47	46.8	12	0.20	1.99	2.02	28.4	Utilities B
34	44/31	238	13	1.43	18	-5	66	53	34.0	12	2.06	2.66	3.03	2.7	Manufacturing A
24	80/23	193	9	9.26	80	-62	55	75	113.1	12	4.93	2.76	3.30	7.1	Transportation B
24	26/19	236	16	2.12	33	19	62	75	70.0	02	1.50	1.80d	2.06	2.8	Food A
42	42/30	227	14	4.12	59	26	23	42	25.7	12	3.07	2.91	3.47	4.2	Telecomms. B
43	44/35	280	13	2.60	34	23	15	41	10.2	12	2.69	3.30	3.77	6.8	Housing A
63	66/42	358	19	2.69	52	34	43	28	21.7	04	3.25	4.79d	5.34	3.9	Consumer C
33	34/29	210	10	3.68	38	11	39	54	22.5	12	2.98	3.20	3.54	3.5	Nonbank fin. B
32	42/32	75	16	8.03	124	-11	97	54	58.5	12	5.26	2.09	2.66	25.0	Nonbank fin. B
22	28/19	787	13	4.65	60	5	45	81	101.0	12	3.38	1.66	2.04	4.1	Consumer D
60	89/53	254	12	0.00	0	-31	82	29	163.5	12	4.65	4.99	5.30	1.9	Office equipment B
35	35/23	454	23	0.34	8	51	64	50	85.1	01	1.13	1.50	1.93	4.0	Retailing

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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
331 KEMPER	1738	383	3135y	4	205.6	6	6.6	6.4	13.3	12.3	12078	12
332 SAFECO	1736	335	3018y	11	234.8	12	7.8	7.7	14.7	15.1	7732	17
333 WISCONSIN ENERGY	1734	339	1541	13	189.1	8	12.3	12.8	10.4	14.9	2803	-6
334 FLORIDA PROGRESS	1731	315	2002	2	196.6	-5	9.8	10.5	11.0	13.7	4304	4
335 CLOROX	1729	312	1354	14	138.5	15	10.2	10.2	18.2	18.3	1161	19
336 BANK OF BOSTON	1728	340	5296	24	322.3	1539	6.1	0.5	NA	16.4	36061	6
337 GENERAL CINEMA	1724	412	2378	75	99.3	2	4.2	7.2	10.8	16.2	1898	15
338 USAIR GROUP	1722	354	5707	90	165.0	-15	2.9	6.5	6.7	8.1	5515	38
339 US WEST NEWVECTOR GROUP	1715	NR	133	32	-24.8	NM	NM	NM	NM	-14.5	307	26
340 PHELPS DODGE	1712	408	2320	44	420.2	179	18.1	9.3	22.4	NA	2755	22
341 WEST POINT-PEPPERELL	1690	480	2367	34	78.2	12	3.3	4.0	7.4	10.1	2358	62
342 ALEXANDER & BALDWIN	1687	417	665	5	135.1	12	20.3	19.1	NA	22.6	1070	7
343 AMERICAN STORES	1681	317	18478	29	98.3	-36	0.5	1.1	5.3	8.4	7112	92
344 PACCAR	1672	394	3112	28	175.8	56	5.7	4.6	18.8	19.3	2832	18
345 PENN CENTRAL	1669	347	1547	23	94.1	210	6.1	2.4	NA	5.3	2400	-2
346 H. F. ANHANSON	1654	362	3517y	34	202.0	-5	5.7	8.2	11.0	10.8	40258	32
347 CORESTATES FINANCIAL	1653	361	1630	13	179.5	11	11.0	11.2	18.9	16.2	16431	9
348 UNITED CABLE TELEVISION	1648	421	284	18	0.3	NM	0.1	NM	1.7	0.3	824	29
349 CITIZENS & SOUTHERN	1647	366	2090	13	206.3	31	9.9	8.5	23.6	16.7	21098	3
350 NIAGARA MOHAWK POWER	1645	313	2800	7	208.8	261	7.5	2.2	7.0	8.5	7076	4
351 BANK OF NEW ENGLAND	1644	289	3197	19	281.7	104	8.8	5.1	27.7	17.3	32200	9
352 ARMSTRONG WORLD INDUSTRIES	1624	316	2680	13	162.7	8	6.1	6.4	14.8	NA	1678	15
353 COLUMBIA GAS SYSTEM	1600	407	3129	12	119.0	7	3.8	4.0	8.0	7.3	5641	4
354 LONG ISLAND LIGHTING	1598	513	2138	3	298.5	11	14.0	13.0	9.2	8.9	8317	-10
355 DILLARD DEPARTMENT STORES	1595	426	2558y	16	113.8	25	4.5	4.1	14.0	16.6	1717	15
356 NORWEST	1594	409	2475	8	211.2	NM	8.5	NM	NA	19.0	21750	5
357 MERCANTILE STORES	1589	345	2266y	5	144.5	12	6.4	6.0	13.8	15.5	1496	7
358 GENENTECH	1574	155	323	48	20.6	-51	6.4	19.3	4.5	5.0	669	8
359 DANA	1570	355	5190	17	162.2	28	3.1	2.8	16.0	16.9	4786	-3
360 CONSOLIDATED PAPERS	1558	371	897	21	149.9	56	16.7	12.9	NA	20.9	935	16
361 SONOCO PRODUCTS	1557	456	1600	22	96.3	57	6.0	4.7	15.8	22.2	977	11
362 CASTLE & COOKE	1555	477	2469	33	112.3	26	4.5	4.8	12.0	14.5	1836	46
363 VALHI	1552	481	2252	63	80.6	85	3.6	3.2	15.1	26.0	2291	-5
364 FIREMAN'S FUND	1550	329	3691	-17	247.0	-18	6.7	6.8	NA	16.6	11190	6
365 LIZ CLAIBORNE	1532	363	1184	12	110.3	-4	9.3	10.9	24.7	25.5	573	31
366 E. W. SCRIPPS	1526	NR	1214	6	70.1	55	5.8	3.9	9.4	11.5	1562	2
367 MAYTAG	1521	304	1890	4	135.5	-8	7.2	8.1	NA	28.9	976	11
368 TW SERVICES	1515	546	3574	44	66.9	18	1.9	2.3	NA	13.5	2100	-1
369 BRUNSWICK	1512	276	3282	6	193.1	14	5.9	5.5	NA	20.5	2092	10
370 SNAP-ON TOOLS	1508	323	855y	13	113.3	28	13.3	11.7	NA	22.5	668	8
371 CAPITAL HOLDING	1504	356	2046	15	189.9	6	9.3	10.0	NA	16.5	13000	25
372 TYCO LABORATORIES	1490	522	1792	43	82.0	60	4.6	4.1	10.5	18.4	1413	55
373 ORACLE SYSTEMS	1488	492	395	111	56.3	142	14.3	12.4	NA	34.1	321	84
374 W. W. GRAINGER	1484	327	1535	16	108.8	20	7.1	6.9	17.1	17.2	936	13
375 NAVISTAR INTERNATIONAL	1484	373	4113	13	236.5	23	5.8	5.3	30.0	34.2	2239	15

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P. 186

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES 1989 EST. \$	VARI- ATION %	
30	32/21	104	9	2.40	21	35	37	58	47.6	12	3.19	3.50	3.62	9.2	Nonbank fin. B
28	29/23	111	8	3.93	30	9	58	63	70.0	12	3.12	3.59	3.36	7.9	Nonbank fin. B
26	28/24	141	9	5.98	56	10	40	67	54.8	12	2.55	2.73	2.85	3.5	Utilities A
34	36/32	131	10	7.56	73	1	34	51	40.3	12	3.74	3.52	3.66	3.0	Utilities A
31	35/27	228	13	3.33	43	8	42	55	53.9	06	1.90b	2.40	2.55	1.6	Consumer D
25	30/23	92	5	4.99	27	-1	70	69	84.9	12	0.10	4.66	4.70	2.9	Banks A
25	27/16	287	22	1.59	36	33	42	69	54.5	10	1.18	1.12	1.28	13.1	Consumer C
40	41/30	85	10	0.30	3	6	87	43	101.6	12	5.27b	3.81	4.50	12.5	Transportation A
24	34/14	1005	NM	0.00	0	NA	15	51	NA	12	-0.41	-0.51	-0.19	69.5	Telecomms. A
56	62/36	157	4	4.28	18	56	74	31	265.1	12	4.62	13.15	11.65	25.2	Metals C
57	59/28	214	19	2.11	40	92	47	30	294.2	09	2.26b	2.98	2.64	12.6	Manufacturing D
37	37/23	232	14	2.16	30	52	44	46	58.7	12	2.30	2.70	2.92	14.5	Transportation D
56	67/48	185	22	1.79	39	-2	75	30	62.7	01	4.19	2.54	3.69	22.3	Food C
48	48/33	183	10	5.26	51	31	49	35	47.1	12	3.13	4.90	5.37	6.5	Automotive A
24	25/21	95	18	0.43	8	7	74	71	35.0	12	0.44	1.33	1.74	18.2	Conglomerates
17	19/14	88	8	5.25	43	5	82	99	63.0	12	2.03	2.05	2.35	6.8	Nonbank fin. C
42	43/38	152	9	4.00	37	10	46	39	51.7	12	3.91	4.50	5.00	1.2	Banks A
37	38/29	1286	161	0.16	26	22	41	45	48.6	05	-0.11	0.23d	0.45	NM	Publishing/TV A
27	28/23	138	8	4.64	38	1	50	62	45.2	12	2.52	3.25	3.60	3.5	Banks C
12	16/12	87	10	9.90	99	2	27	136	59.3	12	0.05	1.21	1.16	25.6	Utilities A
24	31/22	102	6	5.73	34	-13	47	69	52.1	12	2.04	4.06	4.41	2.4	Banks A
35	44/32	181	10	2.85	29	4	70	46	91.6	12	3.18	3.51	3.73	4.5	Consumer B
35	37/27	105	14	5.67	81	10	44	45	78.6	12	2.30	2.46	2.69	12.4	Utilities B
14	17/8	64	7	0.00	0	66	51	111	116.7	12	1.73	2.02	2.14	10.2	Utilities A
50	50/33	232	14	0.32	5	32	33	32	34.0	01	2.83	3.53	4.07	6.4	Retailing
36	36/27	150	8	4.13	33	24	79	44	56.1	12	-0.87	4.52	4.95	4.3	Banks B
43	47/35	171	11	1.86	20	2	34	37	27.5	01	3.52	3.92	4.29	2.4	Retailing
19	47/14	382	79	0.00	0	-53	14	83	148.7	12	0.50	0.24	0.52	38.4	Health care B
39	41/34	164	10	4.14	40	2	53	41	46.4	12	3.21	3.99	4.22	5.7	Automotive B
36	44/33	217	10	2.80	29	11	20	44	30.9	12	2.20	3.44	3.84	4.8	Paper B
36	39/24	360	16	2.03	33	46	26	44	32.7	12	1.40	2.20	2.52	3.1	Containers B
26	29/21	215	13	0.00	0	24	54	59	33.6	12	1.65	2.05	2.17	7.1	Food B
14	15/8	500	19	0.73	14	47	3	114	8.0	12	0.39	0.70	NA	NM	Conglomerates
33	34/26	104	7	1.82	13	16	78	47	54.1	12	0.91	4.73	2.90	20.8	Nonbank fin. B
18	20/13	353	14	1.00	14	9	52	88	179.0	12	1.32	1.26	1.45	4.5	Consumer A
19	19/15	250	21	1.55	32	NA	9	79	NA	12	0.62	0.93	1.05	NM	Publishing/TV B
20	28/19	324	11	4.78	54	-12	44	77	140.2	12	1.91	1.77	1.67	7.7	Consumer B
31	31/16	305	23	0.32	7	69	NA	49	122.6	12	1.16	1.36	1.71	7.3	Leisure A
18	24/16	161	8	2.51	20	-5	60	86	93.6	12	1.90	2.20	1.97	19.2	Leisure D
36	45/33	299	13	2.76	37	-4	47	42	61.8	12	2.13	2.72	3.08	4.7	Manufacturing B
34	34/27	136	8	2.99	25	2	61	45	39.2	12	3.33	4.00	4.10	3.6	Nonbank fin. B
36	38/24	334	16	0.79	13	50	61	42	87.1	05	1.75b	2.23d	3.00	8.8	Manufacturing C
24	25/15	900	21	0.00	0	49	39	62	190.5	05	0.65	1.12d	1.65	3.5	Office equipment C
55	68/52	234	14	1.61	22	-4	60	27	51.4	12	3.14	3.92	4.38	2.7	Services B
6	7/4	244	7	0.00	0	4	44	253	97.9	10	0.50	0.89	0.90	13.4	Automotive A

1. TO TABLES APPEAR ON PAGES 218-219



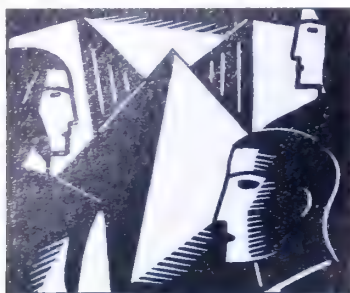
THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
376 BANK OF NEW YORK	1476	516	2620	22	213.0	106	8.1	4.8	17.2	16.5	47388	105
377 MIDLANTIC	1472	358	1846	20	222.9	38	12.1	10.5	22.2	17.4	18945	11
378 WM. WRIGLEY JR.	1469	341	891	14	87.2	24	9.8	9.0	28.4	28.3	440	8
379 METRO MOBILE CTS	1469	555	67	165	-40.5	NM	NM	NM	NM	NM	236	-6
380 INLAND STEEL INDUSTRIES	1455	470	4068	18	248.8	123	6.1	3.2	13.0	15.1	2925	10
381 H&R BLOCK	1454	351	853y	10	90.2	21	10.6	9.7	NA	24.5	485	15
382 WANG LABORATORIES	1447	277	3075	1	50.3	-47	1.6	3.1	4.9	3.2	2911	4
383 REEBOK INTERNATIONAL	1440	305	1786	29	137.0	-17	7.7	11.9	18.1	19.9	1063	3
384 TEMPLE-INLAND	1434	395	1774	11	199.2	41	11.2	8.8	13.8	18.9	1982	10
385 LUBRIZOL	1432	346	1126	10	131.2	61	11.7	8.0	NA	21.3	971	3
386 GAP	1425	564	1252	18	74.2	7	5.9	6.6	27.8	29.1	481	11
387 GAF	1418	368	961	15	90.8	-9	9.4	12.0	11.5	15.2	1416	-11
388 HOMESTAKE MINING	1413	372	433y	-16	63.3	-57	14.6	28.4	NA	8.5	967	31
389 ZAYRE	1410	432	1921	2	55.1	-55	2.9	6.5	8.5	10.3	1868	-27
390 NALCO CHEMICAL	1406	357	994	18	106.0	32	10.7	9.5	19.6	22.2	839	7
391 BAUSCH & LOMB	1404	390	978	16	97.9	15	10.0	10.2	15.0	16.5	1211	24
392 OKLAHOMA GAS & ELECTRIC	1375	393	1098	3	137.8	21	12.6	10.7	10.4	15.2	2521	3
393 BLACK & DECKER	1372	438	2374	18	104.3	62	4.4	3.2	14.9	13.7	1929	16
394 GIANT FOOD	1368	497	2904	8	89.4	41	3.1	2.3	16.5	22.4	961	12
395 SQUARE D	1368	364	1657	12	118.9	8	7.2	7.4	NA	18.8	1336	4
396 PARKER HANNIFIN	1353	325	2397	15	108.4	19	4.5	4.4	10.6	12.4	1809	15
397 RITE AID	1353	367	2746	21	95.3	10	3.5	3.8	14.3	15.7	1413	13
398 MNC FINANCIAL	1348	416	1983	24	170.2	14	8.6	9.3	24.5	15.3	18015	8
399 REPUBLIC NEW YORK	1341	402	2105	26	169.7	413	8.1	2.0	11.8	13.4	24519	10
400 STANLEY WORKS	1332	401	1909	8	103.5	7	5.4	5.5	11.8	14.8	1405	1
401 ANADARKO PETROLEUM	1329	415	333	45	39.7	337	11.9	4.0	7.7	8.9	1490	4
402 WEIS MARKETS	1328	380	1189	5	82.6	9	6.9	6.7	16.8	16.8	596	11
403 CINCINNATI BELL	1328	595	738	16	84.3	31	11.4	10.1	NA	17.0	1253	10
404 NEW ENGLAND ELECTRIC SYSTEM	1318	424	1520	5	-43.2	NM	NM	12.7	NA	-5.1	3718	-6
405 B. F. GOODRICH	1317	403	2417	19	209.9	151	8.7	4.1	NA	19.9	2073	7
406 TELERATE	1316	321	440	31	91.2	21	20.7	22.4	NA	26.8	543	15
407 TAMBRANDS	1316	423	563	9	85.3	11	15.1	14.9	NA	24.7	465	14
408 UNITED ARTISTS COMMUNICATIONS	1306	406	841a	40	20.2	158	2.4	1.3	4.6	13.8	1488	39
409 ROUSE	1304	486	462y	19	20.0	69	4.3	3.1	5.6	26.5	2080	19
410 COMCAST	1290	477	412a	59	-19.7	NM	NM	NM	NM	-8.4	1609	55
411 NORTHROP	1290	378	5797	-4	104.2	11	1.8	1.6	NA	-2.8	3139	1
412 AMERICAN FAMILY	1287	413	2325	24	108.9	17	4.7	5.0	14.0	17.0	6074	21
413 GERBER PRODUCTS	1284	540	1017	11	76.7	54	7.5	5.4	17.1	21.0	662	-8
414 MAPCO	1281	484	1802x	10	117.1	105	6.5	3.5	16.1	20.0	1376	1
415 TECO ENERGY	1277	405	1034	7	126.1	8	12.2	12.1	10.7	14.6	2315	2
416 CROWN CORK & SEAL	1277	511	1834	7	93.4	6	5.1	5.1	15.4	15.1	1073	1
417 UNUM	1271	506	2199	5	129.3	52	5.9	4.1	9.5	9.5	8100	10
418 JEFFERSON-PILOT	1267	397	1223	4	97.5	7	8.0	7.8	7.3	7.3	4174	6
419 ILLINOIS POWER	1267	353	1285	5	155.4	-46	12.1	23.7	6.0	6.2	6053	2
420 McKESSON	1267	414	7052y	8	91.1	21	1.3	1.1	10.9	13.1	2292	0

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VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
PERCENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST \$	ESTIMATES VARI- ATION %	
45	45/28	121	9	4.29	37	55	77	33	139.8	12	2.81b	5.21	5.92	3.7	Banks A
39	45/37	115	7	4.23	28	-1	28	38	45.4	12	4.40	5.85	6.30	1.9	Banks A
37	41/32	476	17	3.02	51	-1	21	40	23.9	12	1.69	2.18	2.39	2.2	Food B
67	68/27	NEG	NM	0.00	0	140	8	22	49.1	09	-0.82	-1.45	-0.87	127.9	Telecomms. A
43	49/30	93	6	3.27	20	37	76	34	133.6	12	3.09	6.99	6.94	17.4	Metals B
28	33/23	395	16	3.75	61	-8	66	52	52.2	04	1.71	1.94d	2.23	3.2	Nonbank fin. A
9	17/8	91	16	1.80	29	-33	45	163	64.2	06	-0.44	0.56	0.47	23.2	Office equipment B
13	18/10	209	11	2.35	25	-11	25	113	91.2	12	1.49	1.20	1.35	8.3	Consumer A
52	58/44	136	7	2.23	16	12	68	28	64.8	12	4.69	7.15	8.14	6.0	Containers B
37	42/33	233	11	3.65	40	8	64	38	98.7	12	2.06	3.40	2.90	6.3	Chemicals
38	43/20	559	19	1.56	29	49	39	37	102.5	01	1.95	2.05	2.64	5.1	Retailing
51	56/44	238	16	0.20	3	2	40	28	214.5	12	2.93	3.18	4.17	4.0	Chemicals
15	18/12	187	22	1.38	31	-18	24	97	63.3	12	1.51	0.65	0.69	26.2	Metals C
25	27/19	263	26	1.59	41	3	52	56	229.8	01	2.10	0.98	2.17	19.7	Retailing
36	40/31	294	13	3.67	49	-3	64	39	56.3	12	2.03	2.70	3.01	3.7	Chemicals
47	48/40	237	14	2.12	31	7	69	30	78.3	12	2.81	3.27	3.75	1.5	Consumer D
33	33/29	155	10	7.32	74	7	42	42	51.3	12	2.60	3.20	3.21	4.0	Utilities A
23	25/17	181	14	1.71	24	31	63	59	106.4	09	0.95	1.65	2.04	3.0	Manufacturing B
23	26/16	343	18	1.76	32	27	25	60	26.3	02	1.26	1.58d	1.82	6.3	Food C
53	56/45	216	12	3.76	45	3	68	26	55.7	12	3.82	4.44	4.88	2.8	Electrical A
28	39/27	154	13	3.03	38	-18	63	49	59.0	06	1.88	2.20	2.44	2.4	Aerospace
33	41/29	222	14	2.51	36	-10	63	41	62.1	02	2.27	2.41d	2.77	4.1	Health care A
45	49/39	122	8	4.22	33	13	43	30	101.0	12	5.00b	5.68	6.69	3.4	Banks A
45	48/40	120	9	2.69	24	3	37	30	18.6	12	0.64	5.01	5.58	5.6	Banks A
31	32/24	191	13	3.08	40	9	47	43	42.7	12	2.22	2.40	2.63	3.4	Manufacturing B
26	28/22	298	34	1.18	39	7	50	52	62.7	12	0.18	0.76	0.88	25.8	Fuel B
29	34/27	269	16	1.91	31	-4	45	45	5.3	12	1.66	1.82	2.10	8.2	Food C
44	47/23	273	17	2.53	43	83	25	30	18.7	12	2.01	2.63	3.12	2.9	Telecomms. B
23	26/20	125	NM	8.92	DEF	5	27	58	46.8	12	3.05	-0.94	2.68	9.5	Utilities A
52	61/45	130	7	3.83	25	17	67	25	229.7	12	3.17	7.99	7.43	12.2	Chemicals
14	22/13	387	14	2.31	33	-6	14	95	29.8	12	0.79	0.96	1.09	8.0	Nonbank fin. A
59	68/51	382	15	3.46	53	20	64	22	75.8	12	3.45	3.83	4.23	0.9	Consumer D
32	32/24	894	44	0.00	0	14	20	41	22.6	12	0.12	0.73d	1.20	NM	Leisure B
27	29/20	1925	74	1.91	141	21	38	48	34.2	12	0.20	0.37	0.56	92.0	Housing B
19	20/13	549	NM	0.62	DEF	8	30	67	71.8	12	-0.15	-0.21d	-0.23	121.5	Publishing/TV A
28	36/25	117	12	4.36	54	4	52	47	65.2	12	2.01	2.22	2.80	19.1	Aerospace
16	17/12	200	12	1.76	21	14	25	81	35.8	12	1.16	1.35	1.55	1.5	Nonbank fin. B
55	65/38	351	24	2.47	60	51	57	20	94.6	03	2.66	4.15d	4.81	8.2	Food B
34	65/50	219	11	1.56	17	26	74	20	59.4	12	2.75	5.88	6.31	3.8	Fuel B
23	25/21	154	11	6.31	67	-1	45	57	46.6	12	1.95	2.13	2.24	2.8	Utilities A
17	52/33	206	14	0.00	0	36	41	27	48.8	12	2.86	3.37	3.77	4.9	Containers A
10	30/20	94	10	1.62	17	27	63	43	46.7	12	1.74	2.86	3.31	2.4	Nonbank fin. B
13	38/29	95	13	3.89	51	10	55	39	36.6	12	2.30	2.50	2.89	7.6	Nonbank fin. B
7	23/17	67	10	15.30	159	-13	19	73	140.4	12	3.75	1.66	2.13	24.8	Utilities A
11	36/30	183	14	4.65	67	-1	52	41	42.5	03	2.14b	2.21d	2.47	2.8	Health care A

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	MARKET VALUE		SALES		PROFITS				ASSETS			
	\$ MIL.	YEAR AGO RANK	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %
421 JOHNSON CONTROLS	1265	419	3227	18	104.6	19	3.2	3.2	10.1	11.9	2038	15
422 BEAR STEARNS††	1262	473	1897y	NA	144.9	NA	7.6	NA	43.0	NA	37901	NA
423 SUN MICROSYSTEMS	1262	439	1462	93	89.6	87	6.1	6.3	19.7	18.8	973	53
424 NEW YORK STATE ELECTRIC & GAS	1262	430	1340	4	171.5	228	12.8	4.1	9.7	13.5	4693	5
425 RORER GROUP	1260	445	1042	12	61.8	14	5.9	5.9	9.5	14.8	1388	12
426 TJX	1259	521	1921	17	85.8	29	4.5	4.1	23.5	28.7	760	23
427 CINCINNATI GAS & ELECTRIC	1256	449	1386	2	226.9	99	16.4	8.4	12.3	16.0	3361	9
428 RAYCHEM	1246	299	1103	9	102.8	15	9.3	8.8	13.3	13.8	1183	14
429 PINNACLE WEST CAPITAL	1237	237	1442	9	4.2	-98	0.3	20.0	1.0	0.2	13100	-13
430 SONAT	1229	454	1392	-2	84.7	8	6.1	5.5	6.7	7.7	3138	-1
431 MURPHY OIL	1228	526	1525y	1	38.7	NM	2.5	NM	NM	5.4	1973	-1
432 COMMUNITY PSYCHIATRIC CENTERS	1225	488	347	22	70.8	18	20.4	21.0	17.0	18.5	478	11
433 FMC	1220	499	3287	5	129.2	-32	3.9	6.1	25.4	-49.6	2749	6
434 IMC FERTILIZER GROUP	1219	NR	1185	21	124.4	66	10.5	7.7	13.4	16.2	1502	6
435 FIRST BANK SYSTEM	1208	418	1954	-21	-310.0	NM	NM	1.0	NM	-36.0	24248	-10
436 AMERICAN MEDICAL INTERNATIONAL	1204	431	3017	9	76.5	-27	2.5	3.8	9.2	10.4	3323	-12
437 QUANTUM CHEMICAL	1203	203	2922	29	360.1	174	12.3	5.8	NA	-88.5	2907	12
438 FIRST EXECUTIVE	1199	543	3049	-12	196.5	13	6.4	5.0	10.6	10.5	18225	11
439 PANHANDLE EASTERN	1199	381	1262	-19	-171.9	NM	NM	7.0	NA	-20.6	2973	-2
440 SCANA	1197	422	1083	-3	128.8	-8	11.9	12.5	9.9	13.4	2887	6
441 WILLIAMS	1193	494	1673	-6	-4.9	NM	NM	1.4	-4.8	-0.4	3567	4
442 ROADWAY SERVICES	1179	396	2185	14	80.2	59	3.7	2.6	NA	12.0	1193	8
443 CABOT	1174	507	1770	21	67.7	85	3.8	2.5	8.8	11.9	1641	2
444 TURNER BROADCASTING	1173	714	807	24	-94.5	NM	NM	NM	NM	NM	1823	-1
445 NIKE	1172	538	1519	59	139.8	135	9.2	6.2	28.1	28.8	721	39
446 DREYFUS	1164	429	268y	-6	90.9	-5	33.9	33.5	15.6	15.4	673	2
447 LOUISIANA-PACIFIC	1163	457	1799	9	135.2	14	7.5	7.2	10.2	11.9	1853	-4
448 WHEELABRATOR TECHNOLOGIES	1161	585	1205	20	42.6	70	3.5	2.5	6.2	8.4	1192	38
449 JEFFERSON SMURFIT	1161	462	1255	14	144.5	57	11.5	8.4	36.3	49.7	764	14
450 WILLAMETTE INDUSTRIES	1159	437	1716	20	161.1	33	9.4	8.5	16.0	21.6	1430	21
451 NATIONAL SERVICE INDUSTRIES	1158	446	1444	7	88.2	12	6.1	5.8	15.3	15.4	832	8
452 CENTEL CABLE TELEVISION	1156	850	154	18	8.5	1906	5.5	0.3	2.8	2.5	550	9
453 PIONEER HI-BRED INTERNATIONAL	1154	469	863	5	61.0	24	7.1	6.0	NA	11.0	979	2
454 TUCSON ELECTRIC POWER	1150	385	543	15	128.9	2	23.7	26.7	10.4	15.5	2061	4
455 GREAT LAKES CHEMICAL	1142	475	616	23	103.3	86	16.8	11.1	NA	22.6	636	20
456 GREYHOUND	1141	459	3305y	32	93.3	13	2.8	3.3	8.1	9.4	3374	13
457 SIGMA-ALDRICH	1141	460	375	23	56.5	35	15.1	13.7	NA	24.5	323	21
458 SHERWIN-WILLIAMS	1141	411	1950	8	101.1	8	5.2	5.2	15.8	16.6	1259	4
459 C. R. BARD	1134	532	758	18	78.7	26	10.4	9.7	23.6	24.6	531	9
460 ASARCO	1129	479	1988	47	207.2	-19	10.4	18.9	14.6	15.7	2223	7
461 CONSOLIDATED FREIGHTWAYS	1127	450	2689	17	113.2	52	4.2	3.2	15.0	15.4	1536	12
462 HOLLY FARMS	1125	762	1798	17	69.0	59	3.8	2.8	12.4	15.6	784	11
463 TRANSOCO ENERGY	1119	565	2774	-12	-27.2	NM	NM	NM	1.4	-8.9	3527	-13
464 PREMARK INTERNATIONAL	1118	487	2397	9	121.2	70	5.1	3.3	14.4	17.0	1655	4
465 ENSERCH	1117	485	2739	7	10.7	-83	0.4	2.4	NA	-0.7	2970	-11

ALPHABETICAL INDEX OF COMPANIES BEGINS ON

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES 1989 EST \$	VARI- ATION %	
35	39/28	143	12	3.35	41	22	49	37	50.5	09	2.20	2.83	3.11	2.1	Electrical C
15	16/11	145	NA	3.64	NA	12	25	82	55.3	06	1.56	NA	1.76	7.2	Nonbank fin. A
17	21/13	265	19	0.00	0	8	47	76	483.4	06	0.56	0.90	1.37	7.3	Office equipment B
22	25/21	107	8	8.99	71	11	28	57	64.0	12	0.70	2.81	2.79	5.6	Utilities A
40	48/28	302	20	2.02	41	9	67	32	135.2	12	1.67	1.96	2.34	3.6	Health care B
24	26/15	421	15	2.20	31	22	15	53	16.9	01	1.35	1.62d	1.85	11.3	Retailing
25	29/25	110	6	8.92	52	6	38	50	75.6	12	2.05	4.32	4.13	5.1	Utilities A
36	54/30	167	10	0.90	9	-34	73	35	124.9	06	2.25	3.69	1.75	23.8	Electrical A
14	28/14	55	NM	11.23	3200	-36	21	87	78.9	12	3.21	0.05	2.35	13.6	Utilities A
30	33/26	112	14	6.61	96	8	55	41	61.4	12	1.95	2.09	2.09	14.8	Utilities B
36	36/27	170	32	2.76	88	30	44	34	38.8	12	-1.29	1.14	0.99	38.0	Fuel B
27	27/21	321	17	1.36	23	19	67	46	75.8	11	1.32	1.54	1.79	1.5	Health care C
36	39/28	NEG	10	0.00	0	27	54	34	65.0	12	4.54	3.60	4.64	7.7	Manufacturing C
46	50/27	180	10	2.16	NA	59	57	26	127.3	06	NA	3.88c	5.94	4.6	Chemicals
20	25/19	137	NM	8.30	DEF	-6	62	61	78.6	12	0.73b	-5.25	2.74	7.0	Banks B
18	18/14	164	14	4.11	60	25	42	69	104.1	08	1.26	1.21	1.13	20.3	Health care C
53	108/51	NEG	4	5.69	22	35	58	23	240.5	12	4.38	13.71	15.16	14.9	Chemicals
15	16/9	75	8	0.00	0	30	40	81	101.3	12	1.74	1.82	2.05	4.6	Nonbank fin. B
21	27/21	144	NM	9.47	DEF	-5	55	57	138.6	12	2.07	-3.15	1.63	29.3	Utilities B
30	34/30	133	10	8.07	80	2	36	40	36.9	12	3.20	3.00	3.11	2.6	Utilities A
31	38/26	103	NM	4.46	DEF	20	69	38	98.5	12	0.69	-0.13	1.71	26.9	Utilities B
30	35/27	176	15	3.67	55	3	63	39	78.2	12	1.26	2.00	2.59	7.0	Transportation D
44	45/33	209	19	2.39	46	32	59	27	50.7	09	1.42	2.27	3.01	6.4	Chemicals
26	26/11	NEG	NM	0.00	0	115	5	46	2.5	12	-4.40	-3.18	-2.68	30.4	Publishing/TV A
32	34/21	242	7	1.90	14	43	48	37	256.8	05	2.70	4.29	4.17	13.4	Consumer A
28	30/24	197	13	1.84	24	-6	66	41	61.0	12	2.26b	2.19d	2.57	7.7	Nonbank fin. A
31	38/26	102	9	2.99	26	8	45	38	64.8	12	3.27	3.54	3.26	13.0	Paper A
24	27/20	228	23	0.00	0	17	71	48	39.9	12	0.83	1.07	1.32	4.2	Services C
30	37/25	399	8	2.02	16	15	16	39	35.7	12	2.39	3.72	4.31	4.3	Containers B
46	54/42	155	7	3.18	23	3	53	25	44.0	12	4.78	6.34	6.85	8.1	Paper A
24	26/20	202	13	3.57	48	5	46	49	26.7	08	1.54	1.75	1.94	2.8	Electrical A
46	46/20	335	NM	0.09	12	129	17	25	41.6	12	NA	0.34	NA	NM	Publishing/TV A
36	39/30	207	19	2.87	54	6	49	32	59.3	08	1.69	1.94	2.40	7.6	Food B
46	60/46	144	9	8.50	79	-16	29	25	49.9	12	4.95	4.95	5.15	5.0	Utilities A
66	66/50	250	11	1.10	12	12	70	17	82.6	12	3.34	5.93	6.49	15.6	Chemicals
30	37/27	116	12	4.40	55	-2	48	38	95.3	12	2.10	2.42	2.67	9.3	Conglomerates
46	51/41	494	20	0.78	16	7	45	25	41.5	12	1.70	2.29	2.68	1.8	Health care D
27	32/24	187	12	2.64	30	-7	62	43	55.3	12	2.09b	2.30	2.55	4.5	Housing A
20	25/18	354	15	1.59	23	7	78	56	72.8	12	1.07	1.38	1.63	2.2	Health care D
27	31/22	86	5	4.47	24	27	48	42	91.5	12	5.34	4.92	4.94	25.5	Metals C
30	38/25	154	10	3.28	33	6	74	38	103.0	12	1.93	3.00	2.73	18.7	Transportation D
61	63/27	254	14	2.16	31	114	42	18	170.0	05	1.77	4.28d	4.27	9.8	Food B
37	40/25	177	NM	3.70	-69	37	46	30	61.2	12	-3.52	-1.97	2.07	17.1	Utilities B
33	36/28	157	9	1.82	17	16	65	34	47.2	12	2.08	3.50	3.31	2.1	Conglomerates
19	22/16	195	NM	4.16	DEF	15	60	58	54.0	12	0.33	-0.07	1.11	22.2	Utilities B

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THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
466 GOLDEN WEST FINANCIAL	1115	557	1410	11	138.3	-10	9.8	12.2	6.9	16.1	16721	31
467 OWENS-CORNING FIBERGLAS	1113	568	2831	-2	197.0	-10	7.0	7.6	41.9	-29.4	1596	0
468 U. S. BANCORP	1110	503	1381	20	123.9	24	9.0	8.6	15.6	13.1	14383	8
469 CELLULAR COMMUNICATIONS	1109	812	52a	79	-10.5	NM	NM	NM	NM	-9.5	278	26
470 BOATMEN'S BANCSHARES	1106	633	1378	2	69.8	-28	5.1	7.1	14.8	6.7	14676	-3
471 MEDTRONIC	1101	420	733	21	95.0	14	13.0	13.7	24.7	22.0	709	22
472 PALL	1086	461	456	12	58.7	20	12.9	12.1	NA	17.4	605	12
473 FIFTH THIRD BANCORP	1080	608	506	21	84.2	33	16.6	15.1	20.2	16.5	5246	20
474 HARRIS	1079	440	2105	1	69.6	-22	3.3	4.3	6.6	7.0	2041	16
475 CIRCUS CIRCUS ENTERPRISES	1076	515	512	12	72.5	17	14.2	13.5	20.3	44.4	529	-2
476 OGDEN	1076	433	1088	21	57.8	21	5.3	5.3	NA	13.3	978	18
477 SOUTHWESTERN PUBLIC SERVICE	1074	490	791	2	104.9	1	13.3	13.4	10.8	15.6	1661	1
478 PREMIER INDUSTRIAL	1073	404	566	16	68.3	22	12.1	11.5	32.8	33.8	263	-21
479 FLIGHTSAFETY INTERNATIONAL	1070	539	183y	34	50.0	20	27.4	30.8	17.4	19.1	438	18
480 PUBLIC SERVICE CO. OF COLORADO	1069	458	1685	2	125.0	-13	7.4	8.7	9.7	13.0	2984	2
481 UNION TEXAS PETROLEUM	1068	524	1152	-10	109.3	95	9.5	4.4	NA	41.0	1717	5
482 OLIN	1066	436	2308	20	98.0	26	4.2	4.0	11.8	14.5	1940	15
483 GEORGIA GULF	1061	563	1061	50	193.6	111	18.3	13.0	66.9	75.7	457	48
484 DUQUESNE LIGHT	1059	478	1063	20	137.4	-11	12.9	17.4	NA	10.7	3877	-7
485 FEDERAL PAPER BOARD	1046	584	1117	9	143.3	94	12.8	7.2	17.0	NA	1335	13
486 COMBUSTION ENGINEERING	1045	388	3484	15	-245.2	NM	NM	1.9	NM	-41.3	2546	-8
487 BATTLE MOUNTAIN GOLD	1040	471	141	15	59.4	25	42.2	38.8	34.9	35.6	192	63
488 LOUISIANA LAND & EXPLORATION	1040	472	726y	-12	-70.2	NM	NM	3.0	NA	-14.1	1429	-11
489 ITEL	1038	725	1693	33	24.8	59	1.5	1.2	4.4	2.0	3571	103
490 NUCOR	1038	534	1061	25	109.4	117	10.3	5.9	NA	23.0	889	47
491 PROVIDENT LIFE & ACCIDENT	1033	610	2827y	12	85.3	451	3.0	0.6	NA	8.1	10723	13
492 DPL	1030	476	989	5	135.7	34	13.7	10.8	9.6	14.7	2556	5
493 ALCO STANDARD	1027	443	3874	5	101.6	19	2.6	2.3	11.4	13.4	1531	17
494 SUNDSTRAND	1026	505	1477	8	-50.1	NM	NM	2.5	NM	-10.2	1567	4
495 PUGET SOUND POWER & LIGHT	1020	489	791	9	128.2	6	16.2	16.5	9.4	13.2	2497	2
496 CYPRUS MINERALS	1019	670	1327	67	170.0	550	12.8	3.3	14.4	17.3	1600	39
497 HILLENBRAND INDUSTRIES	1016	464	884	22	69.7	21	7.9	7.9	17.0	19.7	735	11
498 BENEFICIAL	1013	498	1418	10	105.0	-24	7.4	10.7	NA	12.8	7431	6
499 MULTIMEDIA	1007	615	440	7	26.9	115	6.1	3.0	38.1	-4.9	405	-1
500 AMERICAN NATIONAL INSURANCE	1003	551	934	9	94.2	4	10.1	10.6	NA	NA	4303	3
501 AVERY INTERNATIONAL	1003	501	1582	8	77.7	124	4.9	2.4	12.7	15.3	1119	7
502 PORTLAND GENERAL	1003	483	762	0	109.4	14	14.3	12.6	8.9	11.3	2437	-8
503 NORTON	1000	510	1410	12	85.2	38	6.0	4.9	NA	15.0	1088	5
504 BANDAG	990	508	491	16	69.8	12	14.2	14.8	NA	49.5	306	5
505 NIPSCO INDUSTRIES	990	581	1524	5	122.9	89	8.1	4.5	8.3	10.1	3685	-4
506 MEDIA GENERAL	987	654	756y	6	8.8	-79	1.2	6.0	3.8	3.5	859	4
507 BOWATER	985	398	1410	15	164.3	103	11.7	6.6	16.1	19.7	1810	13
508 GENERAL INSTRUMENT	984	453	1268	15	84.3	57	6.6	4.9	10.9	13.8	1340	26
509 CINCINNATI FINANCIAL	983	593	910	3	124.6	37	13.7	10.3	16.6	16.0	2118	18
510 AMERICAN PETROFINA	980	550	2635y	6	132.9	60	5.0	3.4	14.0	16.5	1702	-6

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES 1989 EST. \$	VARI- ATION %	
36	37/23	129	8	0.79	6	15	65	31	68.4	12	4.84	4.41	4.84	6.0	Nonbank fin. C
28	30/18	NEG	6	0.00	0	42	58	40	85.2	12	5.30	4.71	4.84	9.7	Housing A
27	27/21	118	9	3.70	33	12	56	41	40.6	12	2.43	3.02	3.42	2.4	Banks D
33	34/16	1001	NM	0.00	0	103	54	34	147.4	12	-0.68	-0.35d	0.06	544.8	Telecomms. A
33	37/30	111	16	6.08	100	-2	31	34	50.8	12	4.14	2.01	4.07	6.0	Banks B
82	100/69	255	13	1.46	19	-15	68	13	97.8	04	6.32	6.99d	8.04	1.7	Health care D
29	33/25	321	18	1.68	31	2	52	38	47.5	07	1.31	1.55	1.73	2.5	Conglomerates
50	50/35	212	13	2.42	31	34	27	22	17.9	12	3.05	3.93	4.39	1.1	Banks B
28	33/25	108	17	3.16	54	-4	61	39	50.7	06	2.05	1.63	2.72	2.6	Electrical B
35	35/25	659	15	0.00	0	20	51	31	47.4	01	1.64	2.29	2.61	9.3	Leisure C
27	32/25	249	19	4.04	76	-7	49	39	57.1	12	1.35	1.44	2.08	3.9	Conglomerates
26	28/24	172	11	8.38	88	8	29	41	88.7	08	2.18	2.50	2.54	4.3	Utilities A
27	33/25	530	17	1.76	29	-2	21	39	10.1	05	1.47	1.64	1.96	1.0	Services B
32	32/21	409	21	0.51	11	6	44	34	42.1	12	1.25	1.48	1.76	5.4	Transportation C
20	23/20	124	10	9.82	93	3	34	52	74.0	12	2.49	2.14	2.52	6.0	Utilities A
13	13/9	639	17	1.57	27	17	14	84	17.7	12	0.05	0.73	0.80	16.5	Fuel B
52	60/43	158	11	3.46	39	7	69	21	116.4	12	3.32b	4.63	5.79	5.4	Chemicals
43	46/26	415	6	2.31	15	49	63	25	174.9	12	3.15	6.76	8.16	6.2	Chemicals
18	19/13	95	10	7.11	69	46	25	59	64.1	12	1.81	1.86	2.04	6.4	Utilities A
27	27/17	202	8	2.99	23	31	66	39	89.9	12	1.86	3.51	4.24	10.0	Containers B
27	38/26	176	NM	3.70	DEF	-12	66	39	60.5	12	1.54	-6.40	1.90	11.4	Services A
16	19/13	623	17	0.63	11	-4	37	66	62.3	12	0.74	0.91	0.91	16.2	Metals C
34	35/29	209	NM	2.93	DEF	0	81	30	65.8	12	0.80	-2.27	1.03	44.4	Fuel B
22	24/17	142	49	0.00	0	12	69	48	57.9	12	-0.09	0.44	1.07	32.1	Conglomerates
49	52/37	218	9	0.82	8	22	60	21	44.7	12	2.39	5.16	2.90	12.4	Metals B
22	24/15	98	12	3.07	37	28	43	47	40.4	12	0.33	1.83	2.37	19.8	Nonbank fin. B
25	28/24	122	8	9.01	74	5	34	41	78.8	12	2.16	3.01	3.36	10.0	Utilities A
26	28/22	140	12	2.97	36	9	60	40	60.0	09	1.81	2.12	2.55	7.8	Conglomerates
56	58/47	210	NM	3.24	DEF	13	64	18	66.1	12	1.85	-2.71	5.04	7.3	Aerospace
19	20/18	116	9	9.51	82	4	18	55	65.1	12	2.13	2.14	2.10	3.0	Utilities A
39	40/22	108	6	1.03	6	78	62	26	97.4	12	1.02	6.31	6.65	20.9	Fuel A
27	36/26	288	15	1.83	27	-7	32	37	18.3	11	1.51	1.86	2.12	5.6	Manufacturing A
46	54/42	139	11	4.82	53	0	56	22	81.8	12	5.58	4.19	4.99	1.5	Nonbank fin. A
91	91/59	NEG	41	0.00	0	49	58	11	34.0	12	1.03	2.20	2.58	7.5	Publishing/TV A
36	36/29	68	11	4.17	44	26	17	28	16.2	12	3.17	3.33	3.53	6.1	Nonbank fin. B
23	26/20	197	13	2.11	27	-5	61	44	45.0	11	0.81	1.77	2.03	2.6	Manufacturing A
22	24/20	116	10	9.01	93	5	34	46	90.3	12	1.69	2.11	2.09	8.7	Utilities A
48	64/43	176	12	4.21	49	9	74	21	106.4	12	2.97	4.06	4.57	4.7	Manufacturing A
68	70/58	702	14	1.33	19	15	50	15	33.1	12	3.90	4.68	5.24	3.4	Automotive C
14	15/10	96	10	6.22	60	40	58	73	67.1	12	0.53	1.41	1.49	10.4	Utilities A
35	51/34	391	NM	1.16	129	-23	45	29	51.7	12	1.50	0.31	1.85	12.4	Publishing/TV B
27	37/25	122	6	4.13	26	-13	64	36	135.9	12	2.13	4.37	4.47	7.4	Paper B
29	40/21	161	15	1.72	25	5	71	34	180.0	02	2.01	2.58d	2.88	8.3	Electrical B
61	63/45	126	8	2.90	28	NA	23	16	NA	12	5.66	7.70	7.58	6.1	Nonbank fin. B
74	74/62	121	7	4.31	32	13	3	13	2.2	12	6.32	10.07	NA	NM	Fuel B

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THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
511 ALEXANDER & ALEXANDER SERVICES	980	528	1228	4	71.0	-5	5.8	6.3	14.5	19.7	2609	-2
512 TIMKEN	979	504	1554	26	65.9	539	4.2	0.8	6.9	6.8	1593	9
513 TYSON FOODS	974	554	2001	11	83.5	19	4.2	3.9	17.4	23.2	918	13
514 CIRCUIT CITY STORES	971	676	1619	30	63.0	43	3.9	3.5	18.9	25.9	686	11
515 TRINOVA	969	442	1919	14	87.8	21	4.6	4.3	11.2	12.9	1432	8
516 STATE STREET BOSTON	968	536	897	18	92.3	11	10.3	11.0	27.8	18.3	8372	20
517 STERLING CHEMICALS	968	NR	727	48	227.4	186	31.3	16.1	NA	157.9	318	10
518 P. H. GLATFELTER	960	566	569	34	82.2	49	14.4	13.0	22.9	25.9	663	8
519 LOTUS DEVELOPMENT	957	400	469	18	58.9	-18	12.6	18.2	NA	22.1	399	50
520 AMAX GOLD	953	548	104	56	29.7	5	28.5	42.2	NA	45.1	146	53
521 COMDISCO	946	530	1356y	10	91.0	15	6.7	6.4	7.4	19.3	3687	21
522 GENERAL SIGNAL	943	379	1760	10	25.2	-64	1.4	4.3	2.9	2.7	1397	2
523 COMMERCE CLEARING HOUSE	943	455	625y	11	49.5	-6	7.9	9.4	NA	22.6	494	15
524 HUBBELL	938	542	614	6	71.3	14	11.6	10.8	18.5	18.7	532	14
525 PERKIN-ELMER	935	435	1201	22	63.7	NM	5.3	NM	NA	9.2	1284	-4
526 ENGELHARD	933	549	2351	-5	63.7	-9	2.7	2.8	7.5	8.6	1413	16
527 PRIMERICA	933	352	1004y	10	161.8	59	16.1	11.1	14.8	22.0	4445	5
528 EG&G	931	502	1406	11	68.7	19	4.9	4.6	24.5	23.8	539	0
529 KEYCORP	931	601	1394	19	119.9	65	8.6	6.2	15.9	14.2	14646	17
530 UNITED JERSEY BANKS	929	535	1032	16	116.1	13	11.2	11.5	NA	15.0	10888	7
531 HASBRO	928	597	1358	1	72.4	50	5.3	3.6	11.1	10.3	1112	3
532 PENNWALT	926	693	1024	21	48.3	47	4.7	3.9	NA	NA	950	-5
533 SAFETY-KLEEN	926	517	417	25	42.3	21	10.1	10.5	15.6	20.9	399	27
534 ECHLIN	919	553	1348	17	64.8	39	4.8	4.0	9.1	10.1	1110	22
535 GULF STATES UTILITIES	918	690	1520	6	103.1	-57	6.8	16.9	6.3	1.9	6858	1
536 TELEPHONE & DATA SYSTEMS	915	953	196	12	10.6	-7	5.4	6.5	5.2	5.1	563	18
537 ARMCO	911	495	3227	10	130.1	-7	4.0	4.8	13.8	14.6	2788	0
538 NICOR	908	562	1509	5	106.1	27	7.0	5.8	12.6	17.2	2100	6
539 BRUNO'S	907	519	2063	34	44.5	19	2.2	2.4	13.8	16.4	631	11
540 LORAL	903	514	1493	20	85.2	23	5.7	5.6	11.5	17.3	1447	2
541 MBIA	899	702	151	11	92.0	24	61.1	54.6	NA	13.5	1283	11
542 OCEAN DRILLING & EXPLORATION	895	496	406y	4	-30.4	NM	NM	NM	NA	-7.3	1039	4
543 PRIME MOTOR INNS	895	399	398y	20	74.1	28	18.6	17.4	10.6	18.0	1002	42
544 CALMAT	892	531	661y	-1	56.4	-28	8.5	11.7	10.7	11.9	765	13
545 PETRIE STORES	889	520	1218	-2	35.1	-26	2.9	3.8	5.8	5.8	863	-23
546 ARISTECH CHEMICAL	888	570	1065	16	164.5	136	15.4	7.6	32.5	41.3	676	23
547 POTLATCH	885	545	1084	9	112.4	28	10.4	8.8	11.8	NA	1418	9
548 INTERPUBLIC GROUP	883	594	1192y	23	60.1	22	5.0	5.1	20.3	20.0	1310	18
549 KANSAS CITY POWER & LIGHT	882	569	737	5	105.7	2	14.3	14.8	8.9	12.2	2647	0
550 SERVICE CORP. INTERNATIONAL	874	448	567y	17	36.7	-39	6.5	12.3	5.7	6.5	1203	32
551 FLEMING	871	590	10467	21	65.4	32	0.6	0.6	7.4	12.0	2387	91
552 NOVELL	869	685	307	52	34.6	61	11.3	10.7	NA	25.6	227	76
553 LOWE'S	868	588	2517	3	69.2	24	2.8	2.3	11.1	11.9	1109	-1
554 WORTHINGTON INDUSTRIES	868	559	961	13	61.4	31	6.4	5.6	18.3	20.2	512	12
555 E-SYSTEMS	865	529	1439	17	74.6	23	5.2	4.9	13.9	15.8	758	16

ALPHABETICAL INDEX OF COMPANIES BEGINS ON P.

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS 1989 EST \$	ESTIMATES VARI- ATION %	
24	28/21	272	14	4.12	58	14	69	40	51.7	12	1.77	1.71	1.71	9.0	Nonbank fin. A
35	41/28	101	15	2.67	39	7	63	28	68.0	12	0.39	2.34	3.24	8.5	Manufacturing C
15	20/12	271	12	0.26	3	23	8	64	44.6	09	1.06	1.27	1.41	6.7	Food B
43	45/25	399	19	0.28	5	47	72	23	107.8	02	2.25	3.04d	3.55	4.1	Consumer B
28	35/25	143	11	2.26	25	-7	68	34	72.1	12	2.12	2.54	2.79	2.0	Automotive B
28	30/19	191	12	2.03	23	11	54	35	104.2	12	2.12b	2.40	2.70	2.7	Banks A
16	19/14	672	5	1.55	7	8	5	60	2.0	09	NA	3.56	2.90	4.9	Chemicals
40	41/32	302	12	2.50	29	31	70	24	9.5	12	2.25	3.40	3.72	4.3	Paper B
22	34/15	358	17	0.00	0	-28	70	44	393.3	12	1.58	1.29	1.67	8.6	Office equipment C
16	19/12	1444	32	0.50	16	26	7	60	9.5	12	NA	0.50	0.87	13.2	Metals C
23	26/19	200	10	1.05	11	12	37	41	51.0	09	1.85	2.20	2.64	2.9	Office equipment C
50	57/44	101	54	3.64	198	9	NA	19	111.6	12	2.46	0.91	4.27	5.8	Electrical C
53	65/47	430	19	2.67	51	-12	60	18	20.4	12	2.93	2.75	3.28	0.9	Publishing/TV B
35	37/31	247	14	3.07	43	9	41	27	15.4	12	2.25b	2.48	2.86	2.2	Electrical A
22	29/21	135	16	3.13	50	-19	67	43	85.6	07	-0.40	1.35	1.70	7.2	Electrical C
21	22/16	126	15	2.68	39	8	44	45	39.4	12	1.60	1.42	1.63	12.2	Chemicals
22	29/21	127	6	1.27	8	-20	13	42	113.5	12	2.00	3.61	2.96	13.8	Nonbank fin. A
31	39/27	323	13	2.19	30	-18	50	30	44.9	12	2.00	2.30	2.63	2.7	Services A
22	23/20	115	8	5.36	41	8	28	42	24.0	12	2.25	2.90	3.22	0.8	Banks A
21	24/19	126	8	4.96	41	-2	30	43	29.3	12	2.31	2.58	2.90	2.1	Banks A
18	18/13	138	14	0.69	10	33	59	53	41.6	12	0.82	1.24	1.54	8.0	Leisure D
117	119/52	196	30	2.05	62	125	66	8	562.4	12	4.12	3.87	7.48	9.2	Chemicals
28	31/22	456	22	1.09	24	-6	44	34	56.7	12	1.06	1.27	1.54	7.2	Services B
17	19/15	143	15	3.76	55	3	74	56	50.3	08	0.88	1.12	1.30	5.0	Automotive B
9	9/5	44	23	0.00	0	47	39	108	55.4	12	1.66	0.37	1.10	26.4	Utilities A
37	38/14	490	93	0.64	60	161	56	25	38.3	12	0.47	0.40	0.47	15.3	Telecomms. A
10	13/9	109	7	0.00	0	-7	57	88	85.6	12	1.67	1.40	1.91	27.2	Metals B
31	32/27	152	9	6.14	54	22	44	30	44.5	12	2.68	3.48	3.55	4.1	Utilities B
11	13/10	335	21	1.08	23	-9	22	82	37.2	06	0.40	0.53	0.63	3.4	Food C
36	41/31	183	12	2.03	25	-9	63	25	68.8	03	2.92b	3.40d	3.88	3.2	Electrical B
24	24/15	132	10	1.17	11	43	53	37	8.1	12	1.97	2.45	2.72	5.0	Nonbank fin. B
17	23/13	215	NM	1.73	DEF	-18	21	52	25.8	12	-2.51	-0.59	-0.12	355.8	Fuel C
27	41/27	217	13	0.29	4	-25	62	33	92.6	06	1.49	2.05	2.40	3.2	Leisure C
29	46/27	189	16	1.66	26	-12	33	31	41.6	12	2.53	1.82	1.75	8.1	Housing A
19	24/15	147	25	1.05	27	-24	19	47	57.0	01	1.02	0.75	0.87	17.9	Retailing
38	39/24	223	6	2.40	14	27	71	23	225.9	12	2.71	6.62	6.00	9.2	Chemicals
33	35/27	150	8	3.16	26	8	39	27	30.6	12	3.13	4.04	4.70	8.8	Containers B
39	40/30	294	14	2.03	29	19	74	22	37.9	12	2.25	2.72	3.10	2.4	Services D
29	32/26	109	9	8.56	76	14	47	31	84.7	12	3.01	3.20	3.23	4.8	Utilities A
18	25/16	156	13	2.65	36	-30	48	48	80.6	04	1.35	1.06d	1.61	7.3	Services E
33	36/27	159	13	3.08	41	19	58	27	74.2	12	1.86	2.43	3.07	6.5	Food A
32	38/19	641	29	0.00	0	76	54	27	334.7	10	0.78	1.10	2.04	11.6	Office equipment C
23	25/19	150	13	2.05	26	19	44	37	41.9	01	1.41	1.83	1.93	6.3	Retailing
21	25/19	286	14	2.06	28	13	36	41	64.2	05	1.37	1.55	1.80	4.2	Metals B
28	34/26	183	12	1.79	21	0	48	31	62.5	12	1.95	2.40	2.74	2.2	Electrical B

ES 10 TABLES APPEAR ON PAGES 218-219



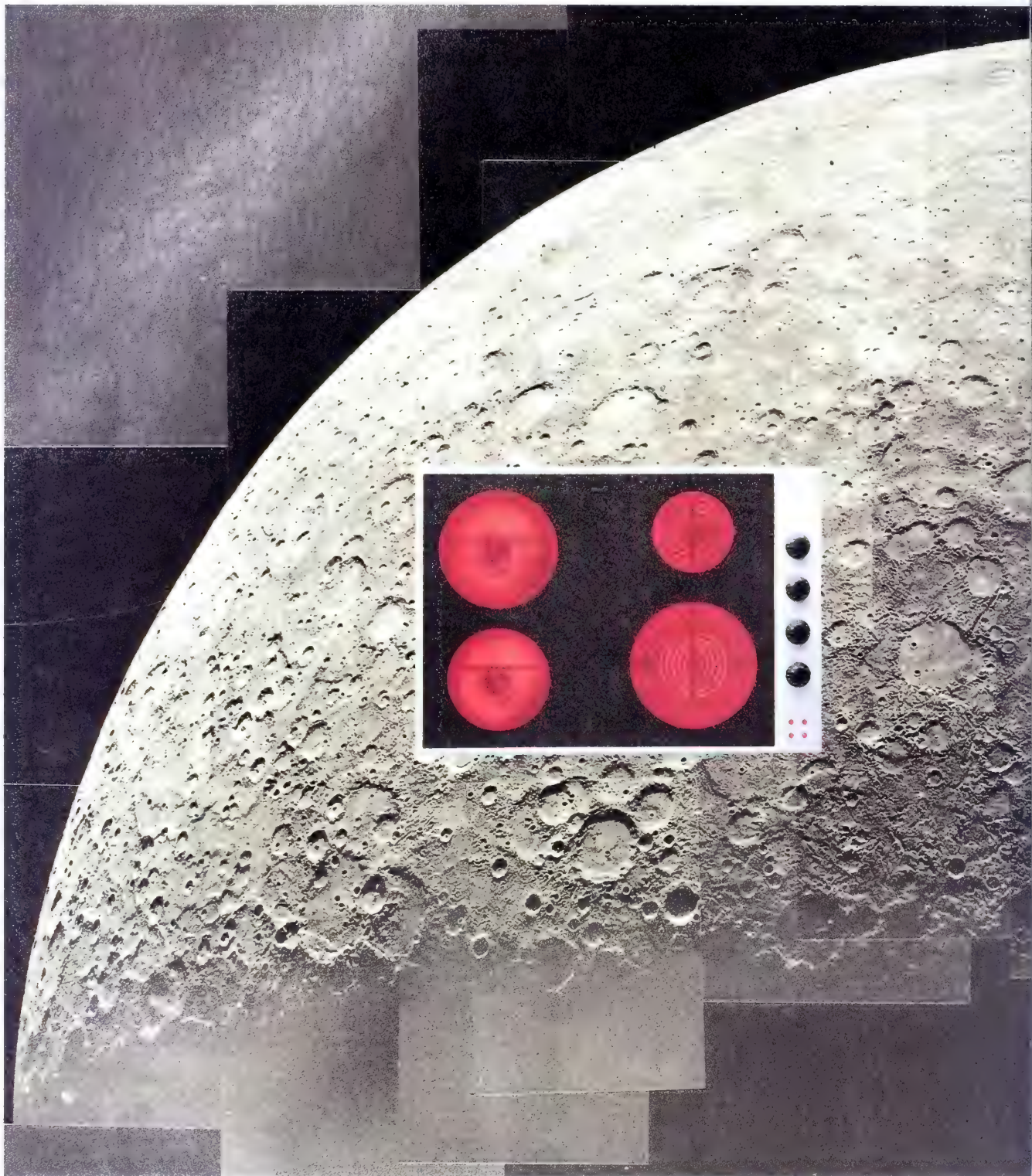
THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
556 ALLEGHENY LUDLUM	864	712	1208	39	108.6	135	9.0	5.3	30.6	37.9	719	40
557 INTERNATIONAL MINERALS & CHEMICAL	863	451	1044	-42	78.7	-13	7.5	5.0	6.4	6.9	2072	9
558 CABLEVISION SYSTEMS	863	642	493	65	-159.4	NM	NM	NM	NM	NM	1172	70
559 CONTROL DATA	861	452	3628	8	1.7	-93	0.0	0.7	2.2	0.1	2524	-2
560 AMERITRUST	858	628	1052	13	103.5	NM	9.8	NM	20.8	14.6	10738	4
561 U. S. SHOE	856	467	2274a	5	5.3	-87	0.2	1.8	2.9	1.1	1197	11
562 MONTANA POWER	853	575	444	5	71.9	15	16.2	14.8	7.9	8.8	1926	3
563 OHIO CASUALTY	852	587	1576	0	128.0	63	8.1	5.0	19.3	21.4	2922	9
564 PRIME COMPUTER	851	567	1595	66	13.0	-80	0.8	6.7	4.5	2.4	1651	24
565 MILLIPORE	851	468	622	18	54.5	14	8.8	9.0	12.5	15.6	539	24
566 HARTFORD STEAM BOILER INSPECTION	848	701	459	7	70.7	17	15.4	14.1	23.5	27.8	730	4
567 INTERGRAPH	840	343	800	25	88.0	26	11.0	10.9	13.9	13.9	831	18
568 MOLEX	838	463	550	26	56.3	12	10.2	11.5	NA	14.5	528	13
569 SIGNET BANKING	836	603	1286	23	152.5	550	11.9	2.2	31.1	22.4	11002	3
570 U. S. CELLULAR	835	NR	15a	NA	-7.7	NA	NM	NA	NM	-9.0	106	NA
571 GEO. A. NORMEL	834	512	2289	-6	61.7	15	2.7	2.2	15.3	14.7	707	1
572 CHARMING SHOPPES	832	656	725	14	38.2	-10	5.3	6.7	NA	17.9	377	25
573 WITCO	832	589	1586	11	71.6	13	4.5	4.4	10.2	12.8	1115	6
574 MOBILE COMMUNICATIONS	830	678	110a	25	-14.2	NM	NM	16.4	NA	-6.9	338	13
575 CONTINENTAL BANK	829	897	3060	10	315.8	NM	10.3	NM	NA	29.1	30578	-6
576 KELLY SERVICES	828	466	1269	9	60.3	20	4.8	4.3	27.6	27.6	326	25
577 IPALCO ENTERPRISES	821	556	609	10	105.8	10	17.4	17.4	10.8	14.6	1752	1
578 OHIO MATTRESS	819	984	662	11	33.2	42	5.0	3.9	9.6	12.7	542	3
579 MGM/UA COMMUNICATIONS	818	811	663	39	-90.3	NM	NM	NM	NM	-49.7	1358	16
580 KROGER	815	227	19053	8	34.5	-81	0.2	1.0	-6.2	-0.6	4706	10
581 YELLOW FREIGHT SYSTEM	809	547	2016	15	69.0	67	3.4	2.3	13.3	16.9	1021	10
582 JOHN H. HARLAND	806	592	333	5	53.3	12	16.0	14.9	NA	22.3	295	11
583 CENTURY COMMUNICATIONS	804	755	175	16	-8.5	NM	NM	NM	NM	NM	830	55
584 DELMARVA POWER & LIGHT	802	576	768	8	84.7	6	11.0	11.2	9.2	12.7	1915	6
585 TECUMSEH PRODUCTS	801	583	1094	15	70.2	-2	6.4	7.5	11.6	11.6	900	18
586 MELLON BANK	801	571	3269	-2	-65.0	NM	NM	NM	NM	-11.9	31'53	2
587 NATIONAL SEMICONDUCTOR	801	387	2516	29	-0.1	NM	NM	NM	-0.0	-1.2	1842	3
588 HOLIDAY	797	632	1597y	-4	117.2	-1	7.3	7.1	19.6	-17.6	2139	-11
589 RUSSELL	797	716	531	11	53.8	16	10.1	9.7	13.6	17.4	561	26
590 DEAN FOODS	795	600	1612	8	54.2	20	3.4	3.0	17.6	16.6	563	13
591 THOMAS & BETTS	795	537	515	18	58.7	21	11.4	11.1	NA	19.1	493	20
592 PROGRESSIVE	794	578	1215	22	108.1	20	8.9	9.0	16.9	27.6	2307	29
593 VISTA CHEMICAL	793	558	794	21	123.8	492	15.6	3.2	42.0	101.6	493	-2
594 LAFARGE	793	645	1309	7	93.5	30	7.1	5.9	11.6	13.9	1206	6
595 AVNET	789	533	1934	16	50.7	36	2.6	2.2	6.5	7.1	1100	1
596 NOXELL	789	527	522	7	51.0	17	9.8	8.9	21.0	20.7	330	12
597 IDAHO POWER	777	573	412	5	49.1	2	11.9	12.2	7.8	7.8	1609	0
598 OVERSEAS SHIPHOLDING GROUP	774	723	307y	5	46.4	31	15.1	12.1	6.6	6.8	1316	4
599 ALZA	773	552	84	19	17.0	22	20.2	19.7	8.2	11.1	248	8
600 ECOLAB	773	624	1212	19	44.1	6	3.6	4.1	9.2	10.6	943	-2

ALPHABETICAL INDEX OF COMPANIES BEGINS ON PAGE 196

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES		
											1989 EST. \$		VARI- ATION %		
38	38/24	301	8	2.61	21	40	42	23	42.9	12	2.27	4.81	5.10	9.3	Metals B
39	50/37	93	12	2.54	30	-14	81	22	224.6	06	0.08	3.30	2.68	9.5	Chemicals
39	39/27	NEG	NM	0.00	0	22	27	22	19.9	12	-2.73	-7.44	NA	NM	Publishing/TV A
21	31/16	82	NM	0.00	0	-17	58	41	129.7	12	0.59	0.03	0.79	45.5	Office equipment B
23	24/17	121	9	4.84	43	34	40	37	43.2	12	-0.24	2.62	2.85	7.7	Banks B
19	29/16	170	38	2.39	92	8	83	45	165.1	01	0.80	0.50d	1.25	31.8	Retailing
35	37/32	110	12	7.83	97	8	49	24	104.8	12	2.52	2.84	3.26	10.4	Utilities A
40	45/32	128	6	5.27	32	9	52	22	39.2	12	4.31	6.53	5.02	12.3	Nonbank fin. B
17	21/12	158	45	0.00	0	5	74	49	158.1	12	1.32	0.39	1.44	14.6	Office equipment B
31	41/29	244	16	1.18	18	-20	70	28	62.7	12	1.70	1.96	2.25	2.4	Electrical C
42	42/24	334	12	3.37	40	47	41	20	36.0	12	2.61	3.46	3.18	5.2	Nonbank fin. B
15	33/15	132	10	0.00	0	-30	61	57	202.1	12	1.23	1.55	1.86	7.5	Office equipment C
33	45/33	215	14	0.10	1	-16	36	26	57.0	06	1.72	2.34	2.45	5.5	Electrical D
32	34/23	126	6	4.43	25	5	42	26	33.7	12	0.85	5.71	4.40	2.4	Banks C
30	31/15	983	NM	0.00	NA	NA	11	28	18.0	12	NA	-0.27c	-0.07	158.0	Telecomms. A
22	27/18	199	14	2.02	28	-14	19	38	12.8	10	1.20	1.57	1.74	3.9	Food B
17	18/10	391	22	0.73	16	11	52	50	176.8	01	0.85	0.76	1.04	10.2	Retailing
37	39/33	148	12	4.04	49	-1	65	22	34.3	12	2.72	3.05	3.86	5.8	Chemicals
35	35/26	404	52	0.00	0	26	23	24	51.1	12	0.12	0.67d	NA	NM	Telecomms. A
20	24/14	86	4	3.93	15	25	17	41	38.7	12	-24.28	5.19	3.57	34.7	Banks B
35	48/33	380	14	1.86	26	-13	25	24	30.0	12	2.10	2.51	2.81	2.0	Services E
22	24/22	121	8	7.50	62	1	39	38	43.8	12	2.38	2.64	2.55	2.6	Utilities A
25	25/10	313	25	1.62	40	111	53	33	101.9	11	0.77	1.00	1.09	7.1	Consumer B
16	19/ 9	450	NM	0.00	0	85	4	50	32.9	08	-1.74	-0.97	-0.13	653.4	Leisure B
10	59/ 8	NEG	42	11.06	467	70	41	80	155.3	12	2.20	0.24	0.72	251.6	Food C
28	34/24	198	12	2.49	29	3	63	29	112.7	12	1.44	2.40	2.91	6.5	Transportation D
21	24/19	337	15	3.20	48	-5	44	38	47.9	12	1.26	1.41	1.62	3.7	Office equipment A
19	19/10	NM	NM	0.00	0	39	13	43	18.0	05	-0.11	-0.51d	-0.37	63.9	Publishing/TV A
17	19/17	131	10	8.63	88	3	29	46	65.0	12	1.60	1.70	1.77	2.7	Utilities A
147	151/134	132	11	2.87	33	12	50	5	8.2	12	13.09	12.84	13.85	1.5	Housing A
28	33/24	92	NM	5.07	DEF	5	59	29	81.0	12	-31.19	-3.65	4.34	10.1	Banks A
8	15/ 8	98	NM	0.00	0	-28	55	102	149.5	05	0.48	-1.02	0.37	53.9	Electrical D
30	30/21	NEG	6	0.00	0	9	66	27	94.3	12	4.82	4.70	1.48	27.3	Leisure C
20	20/14	258	15	1.42	21	33	36	40	22.7	12	1.17	1.36	1.58	5.4	Consumer A
30	32/25	287	15	1.99	28	6	29	26	26.5	05	1.60	2.17c	2.48	3.5	Food B
47	61/45	258	14	3.93	53	-5	61	17	36.7	12	2.88	3.46	3.80	3.5	Electrical D
30	32/22	202	8	1.36	10	0	51	27	40.7	12	3.16	3.86	3.50	7.7	Nonbank fin. B
53	61/44	650	8	3.37	25	20	61	15	214.0	09	-0.13	7.10	8.92	5.1	Chemicals
16	20/14	121	8	2.50	20	14	15	50	26.8	12	1.57	1.96	1.96	13.3	Housing A
22	28/19	111	15	2.26	34	-20	74	36	74.4	06	0.64	1.46	1.46	14.3	Services B
20	24/16	320	15	2.36	37	1	32	40	58.8	12	1.08	1.26	1.42	1.7	Consumer D
23	25/20	136	17	7.87	136	1	25	34	58.7	12	1.30	1.32	1.93	10.5	Utilities A
22	22/14	113	17	2.33	39	40	33	36	23.7	12	0.99	1.29	1.46	2.7	Transportation D
25	30/20	505	48	0.00	0	-18	47	31	82.0	12	0.42	0.51	0.79	12.1	Health care B
28	29/21	186	17	2.34	41	10	71	27	75.2	12	1.56	1.63	2.07	3.2	Consumer D

+ 767° F in the sun, – 388° F in the shade



As far as extremes of temperature go, the planet Mercury will put any material to the test. Temperatures there can vary by more than 1080° F.

With its stark landscape of craters, dust and rock, Mercury isn't what you'd call an inviting planet. In fact, conditions on Mercury support no life at all. It's too close to the sun and its atmosphere doesn't allow heat and cold to combine. So temperatures rise to over 767° F on the side facing the sun, while it can

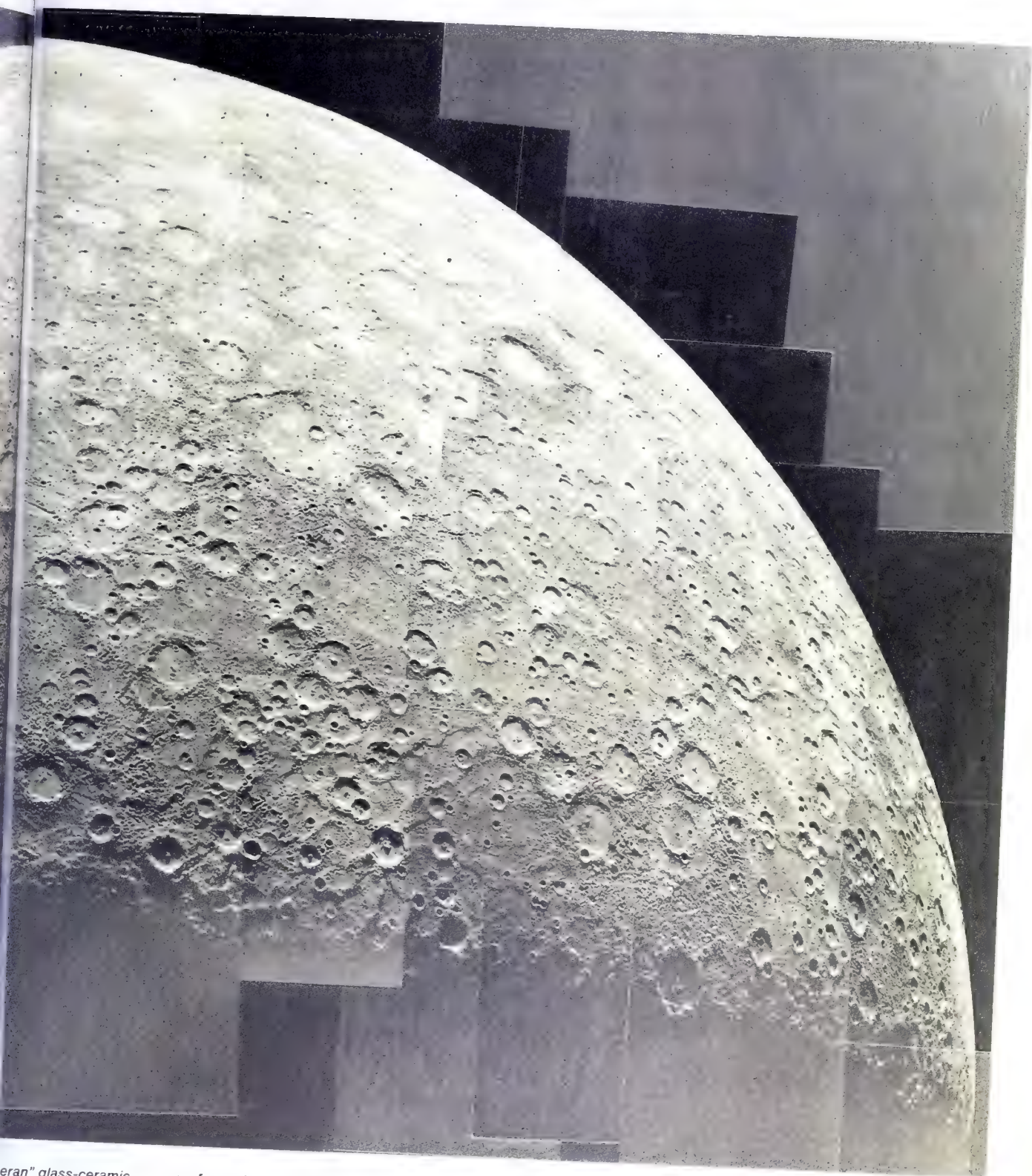
be as cold as – 388° F on the dark side.

Here on earth it's not easy to find a material that can stand up to such extremes without being damaged. That is, unless your kitchen features a cooktop with a "Ceran" panel. Because even if the temperature varies by more than 1472° F,

"Ceran" won't warp a fraction of an inch.

Glass-ceramics from Schott also put us in touch with space. When used in telescope mirrors, glass-ceramics make these mirrors highly resistant to temperature changes. Schott's glass-ceramics are the ideal material for earthbound stoves

What would put anything to the test!



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changes in temperature.
ey wouldn't warp even
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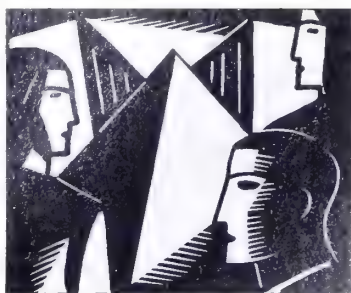
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		MARKET VALUE		SALES		PROFITS						ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
								12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
601	UNION BANK	769	NR	787	34	60.2	50	7.6	6.8	NA	NA	15010	179
602	COMPUTER SCIENCES	768	617	1253	11	49.5	22	4.0	3.6	11.9	12.9	715	14
603	NATIONAL HEALTH LABORATORIES††	767	NR	235	NA	37.7	NA	16.1	NA	NA	NA	302	NA
604	KANSAS POWER & LIGHT	765	560	1166	0	79.8	-10	6.8	7.6	9.5	12.9	1777	3
605	DEXTER	764	675	837y	9	39.9	-8	4.8	5.6	NA	13.3	626	2
606	SOUTHWEST AIRLINES	762	734	860	11	58.0	188	6.7	2.6	8.4	10.5	1271	22
607	FMC GOLD	761	NR	171y	12	61.2	23	35.8	32.5	68.4	67.2	129	12
608	PACIFIC TELECOM	758	736	552	5	58.4	31	10.6	8.5	NA	13.0	1133	-5
609	MASCO INDUSTRIES	758	482	1651	12	82.1	82	5.0	3.1	9.6	22.5	1883	9
610	MERIDIAN BANCORP	756	635	950	12	86.1	8	9.1	9.4	18.9	13.3	9523	13
611	FREEPORT-McMORAN COPPER	752	NR	335	76	94.2	117	28.1	22.8	NA	67.3	291	47
612	BETZ LABORATORIES	749	582	448	16	48.4	19	10.8	10.5	21.7	21.6	319	11
613	FRANKLIN RESOURCES	747	769	213y	2	68.5	11	32.2	29.6	40.5	41.4	352	9
614	IBP	745	655	9066	18	62.3	-8	0.7	0.9	10.2	13.1	1324	3
615	SOUTHEAST BANKING	744	619	1405	11	75.3	222	5.4	1.8	12.0	10.1	15623	11
616	SOCIETY	743	607	972	9	100.1	10	10.3	10.2	18.1	14.7	10010	10
617	INTERNATIONAL LEASE FINANCE	742	728	202y	17	43.4	-9	21.5	27.4	5.6	15.4	1765	55
618	CAESARS WORLD	736	711	856	4	64.8	11	7.6	7.1	15.9	31.3	848	2
619	COMERICA	734	636	1043	11	112.0	57	10.7	7.6	16.9	18.3	11145	10
620	NEWELL	729	856	988	37	61.4	65	6.2	5.2	NA	21.4	820	-3
621	PSI HOLDINGS	729	630	1043	-3	116.6	-20	11.2	13.6	13.8	21.0	2129	-4
622	NORTHERN TRUST	729	667	1003	20	109.3	NM	10.9	NM	NA	27.4	9904	6
623	LONGVIEW FIBRE	728	724	690	20	99.2	47	14.4	11.8	21.6	28.1	652	19
624	AMERICAN GREETINGS	728	727	1246	8	30.7	-36	2.5	4.2	6.2	5.5	1177	-6
625	CHRIS-CRAFT INDUSTRIES	721	893	251	4	21.4	103	8.5	4.4	8.7	22.6	870	1
626	DOMINION BANKSHARES	719	691	898	13	83.0	7	9.3	9.8	18.7	14.4	9204	5
627	ESSELTE BUSINESS SYSTEMS	718	579	1402	13	58.9	4	4.2	4.6	11.7	13.4	1073	4
628	FGIC	717	843	112	-11	75.2	20	66.9	49.7	NA	14.1	955	17
629	CENTURY TELEPHONE ENTERPRISES	713	NR	184y	17	23.4	0	12.7	14.8	NA	14.9	498	5
630	ROCKEFELLER CENTER PROPERTIES	708	613	125y	18	44.7	-2	35.8	43.3	NM	6.9	1527	17
631	CHAMPION SPARK PLUG	707	825	738	3	22.1	36	3.0	2.3	7.8	6.6	555	-17
632	HUNTINGTON BANCSHARES	707	618	881	12	87.6	83	9.9	6.1	21.4	15.9	9506	8
633	AMGEN	705	730	77	56	1.3	-2	1.7	2.7	0.8	0.8	192	1
634	LONGS DRUG STORES	705	629	1925	9	55.9	14	2.9	2.8	18.7	18.7	493	4
635	PEP BOYS-MANNY, MOE & JACK	704	602	630a	17	36.0	5	5.7	6.4	9.3	13.5	557	27
636	GRUMMAN	704	572	3649y	8	86.5	220	2.4	0.8	8.5	10.7	2566	14
637	EQUITABLE RESOURCES	702	638	406	0	47.1	36	11.6	8.5	8.8	10.2	1011	7
638	FIRST MARYLAND BANCORP	702	890	661	11	52.4	16	7.9	7.6	18.7	13.3	6274	11
639	CENTRAL ILLINOIS PUBLIC SERVICE	701	609	616	4	86.2	23	14.0	11.9	9.5	13.5	1678	1
640	CRESTAR FINANCIAL	700	631	1016	8	86.7	53	8.5	6.1	22.7	13.7	10408	7
641	HOMED	698	744	1579y	21	111.3	11	7.1	7.7	7.2	12.1	17009	21
642	MAXUS ENERGY	696	634	575	-12	-61.6	NM	NM	NM	NA	NM	1797	-6
643	AUTODESK	695	704	117	48	32.7	59	27.9	25.9	NA	23.6	159	35
644	KENTUCKY UTILITIES	695	621	560	1	79.3	8	14.2	13.3	10.6	14.9	1351	3
645	KOGER PROPERTIES	694	NR	129	107	4.9	NM	3.8	NM	2.8	5.7	643	80

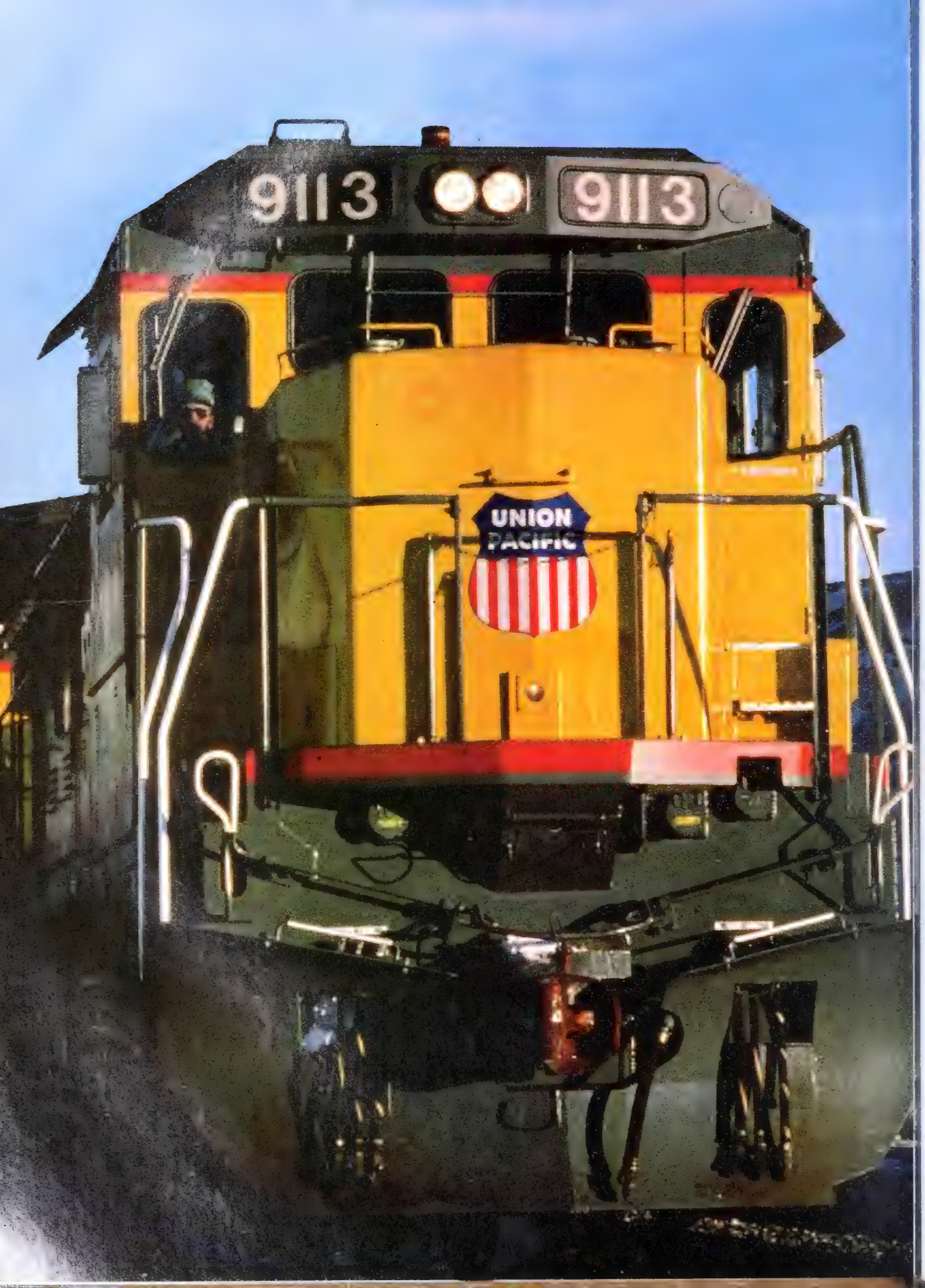
VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
25	34/23	NA	7	4.28	33	-16	35	30	10.4	12	3.01	3.51	3.90	NM	Banks D
49	55/38	200	18	0.00	0	-2	60	16	104.8	03	2.73	3.28d	3.85	3.1	Office equipment C
8	10/8	302	NA	0.00	NA	3	1	99	3.0	12	NA	NA	NA	NA	Health care C
22	25/22	126	10	7.95	78	-6	30	35	42.5	12	2.46	2.25	2.36	4.5	Utilities A
31	34/20	254	19	2.60	50	29	60	25	107.0	12	1.72	1.61	1.95	4.4	Chemicals
24	25/15	138	13	0.57	8	38	74	31	115.9	12	0.63	1.84	2.08	15.3	Transportation A
12	13/9	836	13	0.43	5	20	5	65	6.7	12	NA	0.93	0.98	12.6	Metals C
20	20/13	168	13	4.86	63	52	6	38	8.7	12	1.16	1.52	NA	NM	Telecomms. A
9	14/9	207	30	0.00	0	-16	14	82	32.2	12	NA	0.83d	1.07	6.0	Automotive B
20	22/18	123	9	5.40	50	2	50	37	36.8	12	2.43	2.21	2.45	2.4	Banks A
35	35/17	538	8	10.55	84	NA	14	21	NA	12	NA	4.41	4.48	10.3	Metals C
49	53/44	335	15	3.46	53	8	73	15	73.0	12	2.59	3.15	3.53	2.3	Chemicals
29	30/17	451	11	1.12	13	23	16	26	17.8	09	2.21	2.51	2.83	2.5	Nonbank fin. A
16	17/13	157	12	3.81	45	6	34	47	42.6	12	NA	1.32	1.50	5.6	Food B
25	26/20	108	11	4.55	50	4	60	30	76.8	12	1.14b	2.26	3.77	6.1	Banks C
34	38/31	112	8	4.78	38	1	39	22	32.2	12	3.75	4.19	4.56	2.0	Banks B
23	23/13	308	20	0.35	7	36	22	32	81.3	11	1.40b	1.14	1.74	13.4	Transportation C
30	34/21	356	10	0.00	0	20	69	25	171.9	07	1.30	2.90	3.13	5.6	Leisure C
47	52/41	127	7	4.28	30	12	46	16	55.0	12	4.01b	6.58	7.13	2.8	Banks B
31	31/18	301	14	2.44	35	57	56	23	53.9	12	1.38	2.18	2.35	5.7	Manufacturing A
14	14/11	155	7	1.48	11	-1	67	54	87.3	12	2.33	1.84	2.31	6.7	Utilities A
48	49/40	195	7	2.57	19	17	51	15	52.3	12	-4.77	6.61	5.64	5.2	Banks B
66	78/44	206	8	3.04	23	45	33	11	71.9	10	5.87	8.71	8.95	6.4	Containers B
23	23/15	131	22	2.82	63	24	69	31	126.4	02	1.04	1.55d	1.92	9.1	Leisure D
32	32/17	781	35	0.00	0	31	31	23	35.7	12	0.45	0.92	NA	NM	Publishing/TV A
19	20/15	127	9	4.27	37	-2	27	38	40.4	12	2.10	2.14	2.42	2.6	Banks C
35	41/27	164	12	2.51	31	-11	15	21	12.6	12	2.75	2.87	3.21	2.3	Office equipment A
24	24/16	141	9	0.17	2	40	48	30	7.7	12	2.13	2.64	2.64	2.8	Nonbank fin. B
27	27/11	459	31	1.52	47	141	46	27	51.7	12	0.87	0.85	0.95	22.0	Telecomms. A
19	20/19	109	16	9.75	155	6	26	38	32.4	12	1.22	1.19	1.30	0.0	Housing B
21	23/11	211	33	0.95	32	79	42	34	88.7	12	0.43	0.63	0.81	18.2	Automotive B
19	20/17	128	8	3.95	32	6	22	38	24.4	12	1.24b	2.30	2.54	1.4	Banks B
42	42/25	418	NM	0.00	0	14	38	17	245.2	03	0.10	0.04d	0.75	33.6	Health care B
35	39/33	236	13	2.51	32	5	34	20	25.7	01	2.33	2.75	3.03	2.2	Health care A
13	14/10	263	18	0.78	14	-3	40	55	49.2	01	0.62	0.72d	0.88	3.7	Automotive B
22	26/19	92	9	4.65	40	10	31	33	63.2	12	0.67	2.50	2.58	9.0	Aerospace
34	37/30	152	15	3.79	56	2	52	21	29.8	12	1.69	2.27	2.82	10.7	Utilities B
39	39/22	177	13	2.56	34	67	NA	18	34.9	12	2.65	2.93d	3.32	3.8	Banks A
21	23/20	118	9	8.59	75	2	31	34	80.7	12	1.88	2.35	2.25	5.5	Utilities A
25	27/21	116	8	4.53	38	3	38	28	36.8	12	1.90b	2.92	3.21	1.9	Banks C
33	33/21	76	6	0.60	4	23	82	21	65.8	12	4.69	5.22	5.16	8.9	Nonbank fin. C
8	9/6	677	NM	0.00	0	1	49	90	66.9	12	-5.67	-1.21	-0.74	52.0	Fuel B
29	34/22	501	21	0.00	0	25	64	24	201.4	01	0.89	1.35	1.81	3.6	Office equipment C
18	20/18	141	9	7.62	72	-3	18	38	52.2	12	1.72	1.94	2.01	4.6	Utilities A
28	29/24	802	53	10.18	538	13	21	25	13.8	03	0.52	1.00d	NA	NM	Housing B



THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
646 JOSTENS	693	577	609	15	46.3	28	7.6	6.8	18.5	24.4	399	8
647 HAMILTON OIL	693	640	195	-8	16.8	5	8.6	7.5	NA	4.1	1080	27
648 CAMERON IRON WORKS	690	785	559	19	2.9	NM	0.5	NM	2.4	-0.8	762	-6
649 MINNESOTA POWER & LIGHT	687	660	460	8	72.9	4	15.8	16.4	10.6	13.9	1484	7
650 3COM	687	666	310	57	29.3	63	9.5	9.1	NA	16.7	220	27
651 LOUISVILLE GAS & ELECTRIC	685	644	660	5	85.0	12	12.9	12.1	9.1	13.1	1763	6
652 LOCTITE	680	663	439	15	47.6	30	10.9	9.6	20.7	21.3	357	3
653 FLEETWOOD ENTERPRISES	678	795	1567	13	67.7	48	4.3	3.3	NA	18.0	638	25
654 MANUFACTURERS NATIONAL	678	668	924	21	96.3	1352	10.4	0.9	24.6	16.8	9311	3
655 SPRINGS INDUSTRIES	678	695	1825	10	52.8	-5	2.9	3.4	8.9	9.8	1118	3
656 KANSAS GAS & ELECTRIC	674	599	526	2	77.2	7	14.7	14.1	NA	10.9	2443	-5
657 CIRCLE K	673	737	3231y	25	52.5	2	1.6	2.0	7.1	15.7	1800	42
658 ENVIRODYNE INDUSTRIES	673	914	488	3	48.2	25	9.9	8.1	19.8	30.5	449	9
659 ADOLPH COORS	673	604	1522	13	46.9	-3	3.1	3.6	NA	4.4	1508	4
660 BAYBANKS	673	669	921	19	88.5	28	9.6	9.0	19.5	16.2	9496	12
661 USLIFE	672	657	1279	8	67.7	-9	5.3	6.3	7.7	7.3	4063	7
662 MICHIGAN NATIONAL	670	727	1040	15	93.2	26	9.0	8.1	23.1	16.9	11306	33
663 PITTSBURY	669	842	1583y	15	36.8	NM	2.3	NM	8.5	8.4	992	4
664 PEOPLES ENERGY	668	717	1134	1	82.6	44	7.3	5.1	11.1	15.9	1508	2
665 ROLLINS ENVIRONMENTAL SERVICES	666	465	198	7	27.1	-13	13.7	16.9	16.5	16.7	205	14
666 HARSCO	658	523	1300	8	31.1	-51	2.4	5.3	6.9	7.0	893	11
667 EQUIFAX	658	643	743	11	34.0	11	4.6	4.6	NA	15.7	421	54
668 HOUGHTON MIFFLIN	657	799	368	7	24.1	2	6.5	6.9	NA	12.7	294	6
669 ADVANCED MICRO DEVICES	657	518	1126	13	19.3	NM	1.7	NM	NA	1.4	1081	2
670 LANDS' END	656	870	456	36	32.3	46	7.1	6.6	38.2	40.4	149	49
671 McDERMOTT INTERNATIONAL	656	605	2308	-2	-119.6	NM	NM	NM	NA	-19.0	3446	-11
672 ATLANTIC ENERGY	656	680	676	4	78.1	0	11.6	12.1	9.7	13.3	1660	11
673 MITCHELL ENERGY & DEVELOPMENT	649	751	581a	3	0.4	-94	0.1	1.2	2.7	0.1	1939	-6
674 ROCHESTER TELEPHONE	648	796	479	3	50.9	40	10.6	7.9	NA	15.4	885	3
675 HANDLEMAN	648	871	630	20	39.8	25	6.3	6.1	NA	23.1	345	11
676 FIGGIE INTERNATIONAL	646	791	1200	14	61.9	25	5.2	4.7	13.8	16.9	783	25
677 MARSHALL & ILSLEY	643	758	677	7	76.2	30	11.3	9.3	17.9	16.0	6775	8
678 BEMIS	642	794	1069	15	39.6	24	3.7	3.4	13.5	17.1	595	9
679 CUMMINS ENGINE	641	681	3310	20	-63.4	NM	NM	0.5	-15.9	-11.4	2064	2
680 MICRON TECHNOLOGY	639	781	368	218	121.7	NM	33.1	NM	NA	31.0	495	260
681 A. H. ROBINS	637	664	934	9	58.4	NM	6.3	NM	-4.0	-3.9	1075	5
682 TELECOM-USA	633	NR	524	32	27.3	82	5.2	3.8	24.5	47.1	360	30
683 SEQUA	633	612	1617a	80	56.1	5	3.5	5.9	7.6	7.4	1620	20
684 HECHINGER	632	639	1019	41	48.8	22	4.8	5.5	11.0	13.8	653	14
685 FLORIDA NATIONAL BANKS OF FLORIDA	631	923	749	9	34.9	7	4.7	4.7	15.7	7.3	7828	4
686 TEKTRONIX	631	580	1431	3	-8.6	NM	NM	1.8	-2.2	-1.7	1010	4
687 UNIVERSAL	629	777	2700	18	62.5	1	2.3	2.7	16.1	16.3	1140	13
688 HAWAIIAN ELECTRIC INDUSTRIES	628	729	733	15	59.7	40	8.1	6.7	11.0	12.4	2572	103
689 LEE ENTERPRISES	627	651	257y	6	41.5	18	16.1	14.6	19.2	24.8	320	6
690 CNW	626	943	995	11	69.3	323	7.0	1.8	10.9	12.8	1727	1

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
19	23/17	365	15	3.35	52	9	50	36	37.2	06	1.05	1.24	1.42	1.6	Manufacturing A
27	30/25	196	48	0.37	18	1	24	26	27.7	12	0.77	0.56	0.81	6.8	Fuel B
23	23/11	196	NM	0.18	DEF	11	28	30	19.7	06	-3.62	-1.02	0.39	70.4	Fuel C
24	26/22	141	10	7.49	76	1	23	29	40.5	12	2.34	2.35	2.40	2.2	Utilities A
25	28/16	391	19	0.00	0	30	64	28	240.4	05	0.79	1.30d	1.70	6.5	Office equipment C
33	36/31	119	9	8.18	74	2	27	21	41.4	12	3.34	3.70	3.42	2.9	Utilities A
38	39/28	304	16	2.32	38	8	44	18	46.9	06	1.69	2.32	2.80	1.9	Chemicals
30	31/19	180	14	2.16	31	23	63	23	62.4	04	2.08	3.05d	2.97	6.9	Leisure D
45	48/39	118	7	4.09	29	12	38	15	69.6	12	0.45b	6.35	6.97	1.0	Banks B
38	42/27	125	13	3.13	40	6	28	18	46.5	12	3.13	2.98	3.79	4.9	Manufacturing D
20	22/18	96	9	8.21	76	9	57	35	110.7	12	2.34	2.10	2.05	5.9	Utilities A
16	16/11	224	15	1.81	27	19	74	43	88.1	04	1.04	1.04	1.02	6.7	Food C
37	39/18	425	14	0.00	0	104	29	18	205.5	12	2.12	2.64	2.88	4.4	Manufacturing A
18	21/18	63	14	2.72	39	-5	30	37	47.7	12	1.32	1.28	1.42	7.3	Consumer C
42	48/39	123	8	3.79	29	6	55	16	62.7	12	4.37b	5.47	5.49	3.4	Banks A
39	41/32	73	10	3.51	36	5	52	17	60.5	12	3.94	3.81	4.31	3.8	Nonbank fin. B
45	52/42	122	7	4.49	33	-4	53	15	70.1	12	4.85	6.07	6.96	4.3	Banks B
18	19/11	152	19	0.00	0	64	57	38	85.4	12	-3.40	0.95	1.42	11.2	Fuel A
21	22/16	133	9	7.41	66	14	43	33	48.8	09	1.66	2.31	2.37	4.0	Utilities B
11	20/9	411	20	0.72	15	-34	36	60	104.9	09	0.48	0.55	0.52	18.5	Services C
25	36/24	147	21	4.82	103	-12	44	26	38.5	12	2.20	1.17	2.89	12.5	Manufacturing A
27	33/24	305	18	3.13	57	-5	42	24	36.6	12	1.43	1.47	1.91	3.0	Nonbank fin. A
46	50/31	345	27	1.42	39	47	51	14	75.7	12	1.66	1.70	2.02	5.2	Publishing/TV B
8	17/7	102	74	0.00	0	-31	55	81	164.3	12	-0.72	0.11	0.31	53.3	Electrical D
33	33/19	822	20	0.61	12	56	24	20	45.3	01	1.11	1.61	1.89	4.0	Retailing
18	22/14	104	NM	5.67	DEF	-2	53	37	122.8	03	-6.23	-1.92d	-0.37	218.1	Services A
33	35/32	120	9	8.46	75	8	21	20	28.3	12	4.03	3.68	3.69	2.9	Utilities A
14	14/10	115	66	1.73	115	38	23	47	10.4	01	0.19	0.21d	0.41	30.9	Fuel B
57	60/44	201	13	5.03	66	25	34	11	37.0	12	3.20	4.33	4.52	2.9	Telecomms. B
30	30/17	376	19	1.87	36	28	62	22	78.1	04	1.57	1.86d	2.11	4.6	Services E
92	97/74	177	10	1.30	13	17	6	7	6.9	12	7.02	9.03	NA	NM	Conglomerates
31	32/27	136	9	3.15	28	9	26	21	18.0	12	3.16	3.48	3.71	1.5	Banks B
26	26/19	277	17	2.34	41	28	35	25	21.5	12	1.18	1.48	1.74	4.3	Containers B
60	68/45	102	NM	3.66	DEF	18	83	11	154.1	12	0.55	-6.71	3.92	36.2	Automotive B
18	26/15	163	5	0.00	0	1	18	37	505.6	08	-0.94	3.38	3.29	6.5	Electrical D
26	28/22	NEG	11	0.00	0	8	55	24	25.4	12	-67.53	2.42	NA	NM	Health care D
24	24/16	1093	22	0.00	0	22	20	27	54.0	12	0.58	1.07	1.44	2.5	Telecomms. A
60	69/57	90	9	1.00	9	1	44	11	25.0	12	4.28	6.35d	7.33	2.0	Electrical C
18	20/16	178	13	0.91	12	-4	28	36	59.8	01	1.17	1.30	1.52	5.8	Retailing
24	24/13	133	18	2.19	40	16	40	27	52.1	12	1.22	1.31	1.63	8.1	Banks C
22	30/19	126	17	2.71	45	-15	69	29	42.2	05	-0.55	1.32d	1.80	11.0	Electrical C
37	37/28	164	10	3.77	39	22	42	17	22.2	06	3.25	3.56	3.71	2.8	Consumer E
31	34/28	141	11	6.63	70	5	34	20	30.1	12	2.20	2.90	2.94	7.4	Utilities A
25	29/25	375	16	2.68	42	2	31	25	12.9	09	1.74	1.63	1.75	2.3	Publishing/TV B
39	39/20	128	10	0.00	0	57	48	16	167.7	12	1.44	3.71	3.51	8.0	Transportation B



How Fujitsu helps a legendary railroad make history.

The Union Pacific Railroad is not just a company, it's a call to the consciousness of a nation. Created by Abraham Lincoln's signing of the Pacific Railroad Act of 1862, it laid tracks across a wild continent from Omaha, Nebraska to Promontory, Utah, where it met the Central Pacific coming from the sea. A golden spike marked the birth of America's first transcontinental railroad.

Settled the American West

Union Pacific settled the American West, carrying hundreds of thousands of pioneers into the world of wide open spaces. It made history then, and it's *still* making history: today it is one of America's most progressive railroads, with 23,000 miles of track in 20 states, 30,000 employees, and a reputation for far-sighted thinking in every area of its operations—including its remarkable communications network.

Nationwide network

Union Pacific owns a private voice and data communications network, one of the largest in the world. Covering tens of thousands of miles nationwide and functioning as the railroad's central nervous system, it is extremely sophisticated and absolutely crucial to the company's success. Which is

why, when Union Pacific recently decided to upgrade the network, it turned to Fujitsu.

Number one computer maker

Fujitsu is Japan's number one computer maker, and one of the world's top telecommunications makers, with 100,000 employees, annual sales of \$16 billion, and projects completed in a hundred countries. A high-tech giant that's a major force in the global information revolution, Fujitsu gave Union Pacific a multi-nodal integrated voice and data communications system that is the next generation of business telecommunications. The system will boost productivity, upgrade customer service, and help the railroad keep making history—by helping it be what it has always been: a living legend that knows where the future is.



Jim Merrick of Union Pacific talks to Jay Schrimpl of Fujitsu before the Fujitsu F9600 ISDN switching system. Union Pacific recently purchased a number of such systems, the most advanced in the world, to function as node points in its nationwide communications network. For information call Fujitsu Business Communication Systems at 1-800-654-0715.



FUJITSU

The global computer & communications company.



THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
691 BAIL	626	574	1073	2	32.7	-46	3.0	5.7	NA	7.7	876	12
692 SHAKLEE	625	NR	627	10	27.2	16	4.3	4.1	10.1	10.7	418	11
693 OUTBOARD MARINE	624	683	1653	20	70.7	27	4.3	4.0	11.8	12.2	1284	20
694 ACUSON	623	801	169	60	27.5	64	16.3	15.9	NA	27.0	134	47
695 FUQUA INDUSTRIES	622	659	934	38	76.7	78	8.2	6.4	NA	18.5	1140	55
696 BOSTON EDISON	621	671	1203	2	84.2	-3	7.0	7.3	8.2	9.6	2817	4
697 BLOCKBUSTER ENTERTAINMENT	620	NR	137	217	15.5	279	11.3	9.5	16.8	16.6	132	204
698 AMERICAN PRESIDENT	620	641	2131	17	81.3	3	3.8	4.3	8.8	13.9	1711	3
699 McCORMICK	620	746	1184	10	35.6	46	3.0	2.3	11.8	12.1	770	2
700 INTEGRA FINANCIAL	614	NR	657	9	66.4	5	10.1	10.5	25.1	25.9	6930	5
701 CITY NATIONAL	614	780	371	20	49.3	21	13.3	13.2	NA	22.1	4296	23
702 KING WORLD PRODUCTIONS	614	689	319	24	66.4	45	20.8	17.8	328.1	606.1	163	-14
703 SERVICE MERCHANDISE	612	NR	3093	14	76.5	207	2.5	0.9	13.4	25.4	1711	10
704 BANCORP HAWAII	611	814	630	28	74.9	41	11.9	10.8	19.5	19.0	6635	14
705 GLENFED	609	647	2474y	10	154.9	16	6.3	6.0	5.7	14.1	25025	8
706 FOSTER WHEELER	609	798	1054	-14	28.5	846	2.7	0.2	NA	6.5	1109	3
707 QUESTAR	608	661	486	-1	24.6	0	5.1	5.0	6.1	5.4	1026	-2
708 CARTER-WALLACE	607	658	513	8	43.9	18	8.5	7.8	14.4	14.8	444	13
709 FEDERAL-MOGUL	604	778	1177	9	43.4	6	3.7	3.8	11.7	12.4	811	1
710 SOTHEBY'S HOLDINGS	603	NR	349	25	62.7	60	17.9	14.0	49.5	46.7	351	NA
711 WELLMAN	601	892	315	21	38.0	71	12.1	8.5	22.6	27.2	243	19
712 FIRSTAR	600	800	850	19	109.9	NM	12.9	NM	NA	20.6	7842	6
713 BALLY MFG.	599	817	1941y	12	38.0	NM	2.0	NM	6.5	5.1	2806	10
714 HARCOURT BRACE JOVANOVIH	598	767	1268	16	-53.5	NM	NM	NM	NM	NM	2140	6
715 TRINITY INDUSTRIES	598	753	817	40	25.4	249	3.1	1.2	8.5	11.6	669	25
716 WASHINGTON WATER POWER	597	718	542	36	71.4	5	13.2	17.1	8.8	12.1	1378	-3
717 WPL HOLDINGS	597	686	601	9	61.7	5	10.3	10.7	10.3	13.9	1026	-10
718 HELMERICH & PAYNE	595	687	141	17	20.3	24	14.4	13.6	4.9	4.7	576	0
719 SCRIPPS HOWARD BROADCASTING	594	596	275	17	16.5	29	6.0	5.5	7.1	11.3	609	8
720 NATIONAL EDUCATION	592	946	457	15	46.1	NM	10.1	NM	17.5	25.0	423	20
721 SPIEGEL	591	803	1402y	32	57.0	39	4.1	3.9	8.0	18.0	1207	42
722 MEREDITH	591	745	747	19	31.8	-31	4.3	7.4	8.8	8.5	700	8
723 WENDY'S INTERNATIONAL	589	649	1063	0	28.5	721	2.7	0.3	6.6	6.8	754	-3
724 PAN AM	588	900	3569	17	-96.9	NM	NM	NM	NM	NM	2176	-7
725 ROHR INDUSTRIES	588	872	960	24	34.6	40	3.6	3.2	7.7	8.8	1022	9
726 AMSOUTH BANCORPORATION	585	706	797	22	79.8	31	10.0	9.3	NA	15.0	8313	8
727 CLARK EQUIPMENT	584	822	1278	21	44.1	NM	3.5	NM	NA	11.3	952	8
728 DIEBOLD	584	692	451	3	31.3	-12	7.0	8.1	NA	8.7	455	-2
729 FISHER SCIENTIFIC GROUP	582	637	958	5	38.3	24	4.0	3.4	11.9	12.1	566	0
730 FERRO	582	894	1009	16	46.6	47	4.6	3.6	15.6	15.8	588	4
731 FLOWERS INDUSTRIES	582	648	753	-3	41.0	25	5.4	4.2	14.9	20.0	438	7
732 AMES DEPARTMENT STORES	581	700	2159a	10	41.3	105	1.9	1.0	3.5	9.2	2659	192
733 WILMINGTON TRUST	581	673	313	10	51.8	20	16.6	15.2	30.0	22.7	2982	3
734 UNITED BRANDS	579	616	3503	7	60.4	-2	1.7	1.9	10.1	15.1	1477	27
735 INSPIRATION RESOURCES	579	864	1436y	10	42.0	672	2.9	0.4	11.1	10.3	842	-6

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' 1989 EST \$	ESTIMATES VARI- ATION %	
27	36/26	148	19	4.06	77	-17	50	24	43.2	12	2.54	1.40	2.17	14.5	Containers A
48	48/18	247	23	1.68	39	89	44	13	104.5	12	1.77	2.05	2.13	8.3	Consumer D
32	36/27	107	9	2.47	21	25	81	19	79.0	09	2.56	3.74	4.16	7.8	Leisure D
28	31/19	611	24	0.00	0	47	44	23	105.3	12	0.73	1.17	1.52	3.2	Health care D
29	34/25	150	9	1.09	9	-1	52	21	88.3	12	2.87b	3.42	2.41	10.7	Conglomerates
16	17/13	85	9	11.11	98	4	24	38	85.7	12	1.97	1.86	1.79	17.5	Utilities A
25	27/7	665	43	0.00	0	165	10	25	312.3	12	0.28	0.57	1.15	6.3	Leisure D
37	37/26	120	11	1.37	14	24	53	17	187.3	12	3.42	3.46	3.07	18.9	Transportation D
28	29/20	211	18	2.33	42	32	57	23	90.5	11	1.30	1.53	2.03	3.0	Food B
25	27/22	240	9	4.73	44	9	NA	25	7.2	12	2.52	2.62	2.87	4.0	Banks A
25	27/19	275	12	2.56	32	27	21	25	28.2	12	1.68	2.02	2.33	6.4	Banks D
25	27/16	5603	11	0.00	0	13	42	25	75.5	08	1.11	2.28	2.70	2.5	Leisure B
12	14/4	204	8	0.44	4	169	35	50	308.4	12	0.50	1.51	1.91	20.1	Retailing
42	43/33	155	8	3.22	26	29	67	14	49.3	12	3.82	5.25	5.02	3.9	Banks D
21	24/19	55	4	5.78	23	-6	33	29	41.7	06	5.48b	5.26	4.18	7.3	Nonbank fin. C
17	18/12	139	21	2.55	54	16	52	35	96.8	12	0.09	0.81	1.03	14.9	Services A
32	35/30	134	25	5.88	147	2	67	19	22.3	12	1.33	1.28	2.69	11.2	Utilities B
40	43/32	205	16	1.70	27	7	24	15	39.5	03	2.50	2.90d	3.35	NM	Health care B
52	56/37	173	15	3.33	50	43	52	12	89.1	12	3.24	3.47	4.15	3.4	Automotive B
24	26/15	449	11	1.04	11	NA	5	25	NA	12	1.56	2.23	2.58	1.9	Services E
42	44/26	431	16	0.12	2	67	82	14	148.8	12	1.73	2.64	3.28	5.8	Chemicals
28	28/22	118	6	3.57	21	19	32	21	11.9	12	-2.75	4.87	3.53	2.8	Banks B
22	25/15	102	20	1.07	21	41	29	27	250.6	12	-0.60	1.12	1.76	16.9	Leisure D
10	13/7	NEG	NM	0.00	0	39	34	61	86.1	12	-2.00	-2.04	0.23	NM	Publishing/TV B
33	38/27	274	45	1.51	68	26	68	18	138.9	03	0.74	1.78d	3.63	14.0	Manufacturing A
27	28/24	128	11	9.27	98	7	17	22	44.3	12	2.31	2.54	2.71	2.0	Utilities A
22	24/21	143	10	7.51	77	2	16	27	15.1	12	2.08	2.18	2.20	3.7	Utilities A
25	26/19	137	30	1.71	51	-3	57	24	42.4	09	0.91	0.83	0.95	12.4	Fuel C
58	85/58	406	36	1.74	63	-16	11	10	1.2	12	1.24	1.60	NA	NM	Publishing/TV A
20	31/20	320	13	0.00	0	6	70	29	86.6	12	0.14	1.57	1.94	2.1	Services E
11	12/8	186	10	1.06	10	-9	5	52	20.5	12	1.02	1.18	1.28	2.8	Retailing
31	35/26	158	16	2.06	34	3	56	19	52.4	06	1.77	1.91	2.06	8.3	Publishing/TV B
6	8/6	141	20	3.92	80	-8	18	96	80.3	12	0.04	0.30	0.35	14.8	Leisure A
4	5/2	NEG	NM	0.00	0	30	15	143	72.8	12	-1.91	-0.68	-0.30	192.0	Transportation A
33	35/22	149	18	0.00	0	36	78	18	123.0	07	1.53	1.85	2.29	5.6	Aerospace
24	26/22	110	7	5.47	40	-1	29	24	12.9	12	2.63	3.30	3.56	1.6	Banks C
34	36/25	150	13	0.00	0	35	50	17	85.5	12	-1.08	2.59	3.63	10.3	Manufacturing B
44	48/34	162	19	3.16	59	2	60	13	88.5	12	2.72	2.38	2.76	7.8	Office equipment C
16	21/14	183	15	0.00	0	-4	86	36	22.5	12	0.85	1.04	1.38	2.6	Health care D
42	42/26	197	12	1.99	25	31	64	14	72.5	12	2.30	3.40	3.69	4.6	Chemicals
17	22/16	284	14	3.08	44	-12	29	35	40.8	06	0.79	1.18	1.12	8.5	Food B
16	19/13	130	13	0.65	8	6	61	38	116.1	01	0.88	1.22d	1.36	15.0	Retailing
33	35/26	255	11	3.01	34	18	40	17	30.9	12	2.46	2.98	3.46	3.9	Banks A
15	20/14	145	10	1.34	14	-2	87	39	10.0	12	1.33	1.47	NA	NM	Food B
9	9/6	142	14	0.00	0	48	15	66	49.3	12	0.08	0.63	1.01	24.9	Metals C



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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
736 PHH	578	742	1792	22	21.4	-51	1.2	3.0	NA	6.5	4048	6
737 GENCORP	575	653	1891	17	55.0	206	2.9	1.1	15.4	NM	1230	11
738 CALFE	574	662	2816y	13	134.8	-19	4.8	6.7	6.7	9.7	27479	12
739 AMETEK	572	611	521	21	35.1	-4	6.7	8.5	NA	13.5	526	-3
740 BROWN GROUP	571	673	1707	2	30.1	-36	1.8	2.8	8.0	8.5	776	11
741 LARCE	570	684	408	7	39.1	3	9.6	10.0	20.0	20.0	251	3
742 WETTERAU	567	782	4850	23	42.0	12	0.9	0.9	10.9	18.0	1010	32
743 PIC 'N' SAVE	567	682	402	11	46.9	-1	11.7	13.1	NA	24.2	226	5
744 SOUTHRUST	567	757	626	21	67.6	12	10.8	11.7	18.2	15.2	6645	10
745 NEIMAN-MARCUS GROUP	567	761	1331	12	13.0	NM	1.0	NM	3.7	NM	951	23
746 STONE & WEBSTER	566	738	324y	2	41.2	-16	12.7	15.5	10.9	11.3	560	-1
747 BROOKLYN UNION GAS	565	743	928	2	67.1	13	7.2	6.5	9.7	13.3	1348	10
748 HANOVER INSURANCE	565	774	1580	9	119.9	27	7.6	6.5	19.5	19.6	NA	NA
749 EASTERN GAS & FUEL ASSOCIATES	565	715	672	-1	50.7	7	7.5	7.0	9.5	10.9	1041	6
750 REXENE	564	NR	719	39	129.5	66	18.0	15.1	37.2	55.0	511	NA
751 AMERICAN WATER WORKS	564	775	512	6	56.9	2	11.1	11.6	8.7	12.1	1737	8
752 OLD KENT FINANCIAL	563	788	726	22	77.1	9	10.6	12.0	19.7	16.3	7854	11
753 A. T. CROSS	563	776	228	22	35.4	23	15.6	15.4	NA	27.2	176	13
754 NEUTROGENA	560	623	184	23	24.1	34	13.1	12.0	40.8	40.8	93	31
755 ST. JUDE MEDICAL	558	NR	114	59	33.5	93	29.3	24.1	27.9	27.9	143	41
756 CINCINNATI MILACRON	557	688	858	4	25.0	NM	2.9	NM	NM	NA	721	-5
757 FIRST VIRGINIA BANKS	557	750	482	8	60.9	8	12.6	12.6	NA	15.2	4796	8
758 UNITED INVESTORS MANAGEMENT	557	NR	282y	24	41.9	21	14.9	15.2	13.2	14.5	639	29
759 VONS	557	NR	3917	NA	-23.9	NA	NM	NA	NM	-12.3	1628	56
760 MENTOR GRAPHICS	556	862	301	36	33.5	65	11.2	9.2	NA	16.0	288	26
761 VANGUARD CELLULAR SYSTEMS	556	NR	23	110	-26.6	NM	NM	NM	NA	-52.7	142	154
762 FIRST NATIONAL CINCINNATI	553	703	531	15	55.4	22	10.4	9.8	16.2	12.9	5657	11
763 NERCO	551	771	662	5	75.6	26	11.4	9.5	17.2	19.2	1206	23
764 PHILIPS INDUSTRIES	551	699	869	29	45.7	7	5.3	6.4	15.4	18.7	472	38
765 CRANE	550	622	1313	19	49.2	50	3.7	3.0	NA	17.7	746	9
766 MATTEL	550	993	990	-3	35.9	NM	3.6	NM	17.1	27.5	693	-10
767 UNIVERSAL FOODS	549	961	722	1	29.9	14	4.1	3.7	12.2	16.2	447	11
768 FREEPORT-McMORAN GOLD	548	768	106	5	28.5	-17	26.9	34.0	20.6	19.0	169	20
769 FLORIDA EAST COAST INDUSTRIES	548	770	181y	13	35.6	36	19.7	16.5	9.1	9.1	561	8
770 MEDCO CONTAINMENT SERVICES	548	672	606	45	24.6	54	4.1	3.8	7.5	9.2	477	41
771 BLOCK DRUG	546	816	395	16	42.4	16	10.7	10.7	NA	14.2	396	15
772 VARIAN ASSOCIATES	545	679	1193	16	54.7	NM	4.6	NM	12.5	12.6	882	9
773 CORROON & BLACK	545	719	425y	8	115.9	160	27.3	11.4	NA	55.1	953	17
774 ROCHESTER GAS & ELECTRIC	543	773	774	6	76.1	213	9.8	3.3	8.8	12.6	1823	2
775 NEVADA POWER	540	741	409	9	50.2	-10	12.3	15.0	8.8	12.5	1014	8
776 STRATUS COMPUTER	538	756	265	44	29.3	51	11.1	10.5	NA	22.9	184	35
777 STANDARD REGISTER	536	626	675	1	38.1	-6	5.6	6.1	11.9	13.2	444	4
778 COMMODORE INTERNATIONAL	535	NR	965	18	69.0	131	7.2	3.7	22.2	33.1	681	17
779 ALLEGHANY	533	810	1006	-7	46.0	-30	4.6	6.1	8.9	8.6	1630	5
780 KEYSTONE INTERNATIONAL	533	808	346	18	31.9	43	9.2	7.6	14.5	18.5	340	3

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES		
													1989 EST. \$	VARI- ATION %	
34	36/29	175	31	3.26	100	8	75	17	42.3	04	1.12	2.87d	3.21	2.0	Transportation C
18	23/16	NEG	11	3.31	35	-24	63	32	120.2	11	0.37	1.72	1.92	15.2	Aerospace
23	27/21	42	4	6.09	26	-8	75	25	90.3	12	6.67	5.39	4.07	25.7	Nonbank fin. C
13	17/12	220	16	4.62	75	-18	45	44	30.9	12	0.94	0.80	1.11	4.1	Electrical A
33	38/31	161	19	4.76	90	-6	57	17	45.7	01	2.63	1.74	2.86	3.7	Consumer A
18	22/17	291	15	3.78	55	2	34	32	17.0	12	1.17	1.23	1.41	1.9	Food B
24	27/20	255	15	2.33	35	21	32	24	36.1	03	1.58	1.84d	2.11	3.2	Food A
15	19/12	292	12	0.00	0	-21	66	38	173.5	12	1.20	1.24	1.38	7.8	Retailing
21	23/19	127	8	3.98	33	6	26	27	21.6	12	2.35	2.57	2.82	2.1	Banks C
17	19/13	NEG	NM	1.15	DEF	28	24	33	30.5	07	NA	-0.22	0.33	59.8	Retailing
75	75/60	155	14	3.22	44	1	20	8	19.4	12	6.56	5.41	5.75	11.5	Services A
24	25/22	119	10	7.46	71	7	23	24	21.7	09	2.43	2.49	2.61	5.6	Utilities B
27	30/21	92	5	1.32	6	12	81	21	27.5	12	4.57	5.82	4.53	14.0	Nonbank fin. B
24	27/22	122	11	5.74	64	4	70	23	50.5	12	2.05	2.18	2.44	3.8	Utilities B
18	25/15	287	4	0.82	15	NA	12	31	NA	03	0.98	4.32c	5.75	NM	Chemicals
19	21/15	122	10	4.00	40	39	37	30	17.7	12	1.82	1.84	1.97	3.9	Utilities A
23	25/22	126	8	4.04	31	3	37	25	39.1	12	2.81	2.95	3.03	2.0	Banks B
34	38/28	434	16	3.32	53	23	55	17	28.1	12	1.74	2.13	2.38	3.3	Manufacturing A
27	45/25	949	25	0.75	19	-10	18	21	56.5	10	0.69	1.07	1.35	5.3	Consumer D
24	24/14	465	17	0.00	0	63	30	23	194.2	12	0.81	1.43	3.40	1.8	Health care D
23	27/20	267	22	3.15	71	-5	63	24	53.1	12	-3.35	1.02	1.59	22.5	Manufacturing B
27	28/23	139	9	4.38	40	0	21	21	20.8	12	2.75	2.90	3.16	1.3	Banks C
15	15/7	193	13	2.03	27	62	7	38	NA	12	0.91	1.11	1.33	8.7	Nonbank fin. A
14	14/7	286	NM	0.00	0	81	18	39	25.4	12	NA	-0.77	0.46	11.5	Food C
32	37/23	266	16	0.63	10	22	73	18	309.7	12	1.20	1.92	2.44	3.8	Office equipment C
27	28/12	733	NM	0.00	0	NA	28	14	221.5	12	-1.54	-2.06	-1.38	NM	Telecomms. A
20	22/18	129	10	4.26	43	6	23	28	20.4	12	1.69	1.92	2.19	2.2	Banks B
17	19/14	140	7	3.88	28	13	7	33	5.5	12	1.80	2.26	1.76	16.5	Fuel A
20	23/16	226	13	2.63	34	6	63	28	46.8	03	1.52b	1.75d	1.91	2.3	Manufacturing A
25	34/22	198	11	4.04	46	-11	47	22	56.0	12	2.23	2.17	2.60	6.0	Manufacturing A
12	12/6	420	15	0.00	0	49	28	48	69.5	12	-2.26	0.75	1.04	14.9	Leisure D
33	37/19	299	20	2.17	43	77	43	17	101.2	09	1.40	1.67	2.26	5.9	Food B
13	15/12	365	19	0.38	7	16	18	41	23.9	12	0.84	0.69	0.69	18.9	Metals C
59	64/49	140	15	0.47	7	19	19	9	7.8	12	2.84	3.85	NA	NM	Transportation B
12	18/12	205	24	0.34	8	-10	57	46	127.7	06	0.27	0.49	0.64	4.5	Health care A
32	35/25	183	14	2.00	29	24	21	17	10.1	03	2.22	NA	NA	NM	Consumer D
26	31/25	126	21	0.99	20	1	75	21	99.1	09	0.98	1.27	2.71	7.6	Electrical B
32	35/28	259	5	3.36	16	6	52	17	55.5	12	2.35	6.77	2.49	7.9	Nonbank fin. A
18	18/16	100	8	8.51	67	11	26	31	46.2	12	0.54	2.25	2.25	4.9	Utilities A
20	22/19	142	11	7.51	85	6	10	27	50.1	12	2.01	1.78	2.04	2.6	Utilities A
28	32/21	420	19	0.00	0	8	69	20	290.3	12	0.97	1.45	1.90	3.0	Office equipment B
18	24/15	186	14	2.89	41	-19	25	30	35.5	12	1.36	1.28	1.46	3.4	Office equipment A
17	18/8	213	11	0.00	0	87	28	32	107.5	06	0.71b	1.51	2.35	3.6	Office equipment B
85	86/69	99	12	0.00	0	17	55	6	12.2	12	10.14	7.27	8.00	17.7	Nonbank fin. A
20	24/17	309	17	2.80	47	14	53	27	44.3	12	0.85	1.20	1.44	2.6	Manufacturing A

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		MARKET VALUE		SALES		PROFITS				ASSETS			
		S.M.L.	1987 RANK	1988 S.M.L.	CHANGE FROM 1987 %	12 MONTHS 1988 S.M.L.	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 S.M.L.	CHANGE FROM 1987 %
								12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
781	HERMAN MILLER	531	674	765	18	44.2	16	5.8	5.9	15.1	17.1	487	18
782	SEAGATE TECHNOLOGY	531	474	1351	26	-5.5	NM	NM	10.7	NM	-1.4	971	-2
783	CBI INDUSTRIES	530	698	1376y	19	27.5	50	2.0	1.6	4.4	4.5	1343	6
784	TEJON RANCH	529	998	14y	5	1.4	35	9.9	7.6	NA	4.8	42	31
785	CHAMBERS DEVELOPMENT	529	916	137	133	19.5	100	14.2	16.5	10.1	20.5	301	31
786	HOME SHOPPING NETWORK	526	748	745	12	21.1	-9	2.8	3.5	8.9	13.0	561	3
787	VALLEY NATIONAL	526	708	1147	7	62.3	NM	5.4	NM	10.6	10.1	766	4
788	MANOR CARE	524	789	565	10	-7.9	NM	NM	8.0	NM	-4.1	810	9
789	MERCANTILE BANKSHARES	523	831	362	15	53.4	16	14.8	14.7	NA	15.5	3530	12
790	GREIF BROS.	520	877	412a	16	30.3	47	7.4	5.8	13.1	13.1	267	8
791	FIRST ALABAMA BANCSHARES	520	797	474	14	58.2	4	12.3	13.6	NA	12.8	5174	18
792	SIERRA PACIFIC RESOURCES	520	804	408	13	45.3	6	11.1	11.8	8.3	11.3	1244	9
793	NOBLE AFFILIATES	519	696	192y	1	11.8	-28	6.2	8.7	6.0	6.0	519	-12
794	ATLANTA GAS LIGHT	518	828	973	-6	43.7	-15	4.5	4.9	8.7	11.1	1322	26
795	FOREST LABORATORIES	518	986	92	20	20.4	31	22.1	20.2	11.5	11.5	189	12
796	PRECISION CASTPARTS	515	650	437	8	32.0	-11	7.3	9.0	14.0	17.3	343	23
797	STANHOME	514	982	480	11	40.6	24	8.5	7.6	30.9	28.3	276	13
798	PAINWEBBER GROUP	514	747	2512	3	42.4	-43	1.7	3.1	38.2	2.4	17222	-3
799	IOWA-ILLINOIS GAS & ELECTRIC	512	735	496	4	58.4	5	11.8	11.6	8.6	13.4	1242	5
800	MEASUREX	510	705	265	17	37.1	38	14.0	11.8	18.0	18.1	303	17
801	CALGON CARBON	510	851	226	32	29.5	67	13.0	10.3	28.0	27.8	178	30
802	HARNISCHFEGGER INDUSTRIES	509	721	1248y	22	38.5	190	3.1	1.3	11.1	8.3	1195	12
803	COOPER TIRE & RUBBER	509	934	748	12	41.1	34	5.5	4.6	13.5	16.8	443	7
804	TCBY ENTERPRISES	509	NR	98	42	19.8	52	20.2	18.8	26.5	30.6	93	45
805	NORTHEAST BANCORP	506	NR	323	15	34.6	15	10.7	10.7	18.2	13.7	3242	10
806	TEXAS AIR	506	726	8573	-1	-718.6	NM	NM	NM	NM	NM	8147	-6
807	INDIANA NATIONAL	505	809	545	15	55.8	106	10.2	5.7	23.2	14.2	5927	9
808	WALLACE COMPUTER SERVICES	505	848	408	12	33.9	20	8.3	7.8	NA	15.5	307	13
809	BIOMET	501	NR	124	84	17.0	66	13.7	15.2	NA	19.9	107	13
810	BRUSH WELLMAN	501	780	846	12	32.5	24	9.4	8.5	12.7	13.0	358	-3
811	COMMUNICATIONS SATELLITE	500	805	359	8	62.0	248	17.3	5.3	7.5	11.4	1163	5
812	A. H. BELO	498	792	385	1	10.1	-61	2.6	6.8	NA	4.3	726	-1
813	LONE STAR INDUSTRIES	497	760	371	-51	38.2	-5	10.3	5.3	NA	5.4	1424	-5
814	FIRST AMERICAN	495	766	699	13	30.4	-41	4.4	8.3	17.0	6.5	7204	3
815	ANALOG DEVICES	494	652	452	16	41.1	85	9.1	5.7	11.5	12.1	448	12
816	BOLAR PHARMACEUTICAL	494	830	128	34	30.7	73	24.0	18.5	25.6	25.6	138	86
817	LUBY'S CAFETERIAS	492	854	261	10	27.8	12	10.6	10.5	NA	18.8	186	13
818	STRIDE RITE	492	NR	379	14	34.7	44	9.2	7.2	25.4	25.9	243	28
819	ZENITH ELECTRONICS	491	837	2686	14	5.3	NM	0.2	NM	2.8	1.1	1428	4
820	HANNAFORD BROTHERS	491	937	1262y	22	28.9	20	2.3	2.3	13.3	18.0	387	27
821	M. A. HANNA	490	924	1019	122	83.2	129	8.2	7.9	17.3	20.8	964	-4
822	HARTMARX	490	806	1074	9	38.0	-8	3.2	3.8	9.6	10.6	734	11
823	J. B. HUNT TRANSPORT SERVICES	489	882	393	37	33.0	47	8.4	7.8	17.9	23.2	300	20
824	OMNICOM GROUP	488	779	881	9	39.2	13	4.4	4.3	16.7	19.5	1135	9
825	SPX	487	833	878	13	44.9	72	5.1	3.4	9.8	14.4	696	24

ALPHABETICAL INDEX OF COMPANIES BEGINS ON PAGE 101

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS 1989 EST \$	ESTIMATES VARI- ATION %	
22	27/19	206	11	2.36	26	-7	56	24	85.9	05	1.82	1.99d	2.26	4.5	Office equipment A
11	23/7	135	7	0.00	0	-42	37	49	463.8	06	2.81	1.54	-0.41	96.4	Office equipment C
27	32/24	127	31	2.19	69	17	65	19	70.5	12	0.38	0.87	1.46	11.1	Fuel C
42	42/22	1834	NM	0.12	45	77	20	13	20.7	12	0.14	0.11	NA	NM	Food B
23	25/15	558	27	0.00	0	60	30	23	17.9	12	0.45	0.84	1.07	3.7	Services C
6	8/3	323	28	0.00	0	-13	5	89	30.6	08	0.33	0.21	0.26	30.0	Retailing
27	33/22	85	8	5.41	46	-5	57	20	205.0	12	-2.25	3.16	3.84	10.1	Banks D
14	16/10	272	18	0.97	18	26	40	38	41.6	05	0.00	0.75d	1.10	19.2	Health care C
41	41/34	152	10	3.44	34	10	34	13	30.2	12	3.60	4.16	4.60	0.9	Banks A
42	44/33	225	17	1.33	23	33	21	12	NA	10	1.66	2.46	NA	NM	Containers B
16	17/14	114	9	5.08	45	5	25	33	34.3	12	1.71	1.77	1.92	3.6	Banks C
24	26/21	140	12	7.42	91	18	10	21	29.7	12	1.92	1.98	2.17	3.9	Utilities A
12	14/11	261	44	1.01	44	-15	45	44	39.7	12	0.38	0.27	0.34	54.0	Fuel C
24	28/24	136	11	7.75	84	5	27	21	32.0	09	2.04	2.25	2.29	11.0	Utilities B
30	30/16	291	31	0.00	0	43	48	17	87.9	03	0.96	1.20d	1.51	2.4	Health care B
31	41/24	279	13	0.26	4	-3	48	17	183.1	03	2.27	1.90d	2.56	9.9	Metals C
26	26/15	358	13	2.64	35	56	57	20	50.5	12	1.59	1.96	2.20	2.1	Consumer D
18	20/15	73	31	2.89	90	7	51	29	94.3	12	2.25	0.58	0.99	30.3	Nonbank fin. A
38	42/34	122	9	8.55	78	3	22	13	21.5	12	3.99	4.20	4.21	1.4	Utilities A
28	36/24	250	14	1.02	14	5	73	19	109.6	11	1.39	1.95	2.24	6.2	Electrical C
26	31/19	482	18	0.47	8	32	47	20	119.3	12	0.89	1.47	1.72	3.5	Services C
16	24/14	110	14	1.28	17	-18	74	33	140.3	10	0.51	1.15	1.56	10.4	Manufacturing C
25	28/17	208	12	1.21	15	53	45	20	112.0	12	1.51	2.01	2.22	7.4	Automotive C
19	19/9	786	26	2.08	53	70	25	26	87.6	11	0.49	0.75	0.99	3.6	Leisure A
70	79/43	200	16	2.00	32	69	20	7	33.2	12	4.01	4.39	4.48	3.2	Banks A
13	17/9	NM	NM	0.00	0	18	52	40	249.4	12	-12.58	-18.88	-4.83	82.4	Transportation A
29	30/25	128	9	3.72	34	2	51	17	37.5	12	1.58	3.21	3.48	1.7	Banks B
48	48/38	231	16	1.67	26	19	68	11	25.3	07	2.54	3.05	3.46	1.1	Office equipment A
27	29/16	585	26	0.00	0	76	52	18	121.1	05	0.72	1.04	1.37	3.2	Health care D
29	31/24	201	16	2.21	36	5	63	17	46.4	12	1.38	1.79	2.11	5.8	Metals C
27	31/25	92	8	4.89	39	-5	69	19	54.8	12	0.97	3.35	3.19	6.7	Telecomms. A
25	32/22	211	49	1.75	86	9	32	20	34.6	12	1.22	0.51	0.83	16.0	Publishing/TV B
30	37/27	81	15	6.31	95	9	63	17	77.9	12	1.99	2.00	-0.24	255.9	Housing A
22	29/20	106	16	5.81	95	-8	33	23	43.2	12	2.39	1.32	2.81	3.6	Banks C
10	16/10	145	13	0.00	0	-8	54	48	54.1	10	0.40	0.80	0.94	10.2	Electrical D
24	30/16	413	16	0.17	3	-4	33	21	107.2	12	0.91	1.51	1.73	4.3	Health care B
27	28/20	333	18	2.07	37	20	32	18	24.2	08	1.30	1.51	1.65	1.8	Leisure A
37	37/20	367	14	1.64	24	72	67	13	90.3	11	1.60	2.53	3.18	4.1	Consumer A
18	30/17	104	92	0.00	0	19	45	27	217.4	12	-0.78	0.20	1.10	49.6	Office equipment B
26	26/18	305	17	1.23	21	34	30	19	18.5	12	1.30	1.54	1.76	5.1	Food C
23	24/16	137	7	1.76	12	44	57	22	61.2	12	1.65	3.48	2.47	30.8	Chemicals
26	30/24	137	13	4.19	54	2	70	19	53.8	11	2.01	2.03	2.31	8.3	Consumer A
21	27/15	343	15	1.16	17	26	23	24	55.3	12	0.95	1.40	1.64	4.3	Transportation D
20	22/18	242	13	4.96	62	11	69	25	86.2	12	1.41	1.58	1.83	3.7	Services D
40	45/30	156	11	3.04	33	15	55	12	110.9	12	2.12	3.64	3.56	15.4	Automotive B

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THE 1989 BUSINESS WEEK TOP 1000



THE TOP 1000

	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
826 WISCONSIN PUBLIC SERVICE	487	759	604	4	56.4	7	9.3	9.1	10.6	14.2	993	4
827 HIBERNIA	487	858	546	18	53.0	14	9.7	10.0	22.3	15.9	5834	20
828 STORAGE TECHNOLOGY	485	834	874	17	44.2	133	5.1	2.5	NM	17.6	800	4
829 BERGEN BRUNSWIG	485	NR	3627y	14	37.6	103	1.0	0.6	11.7	16.4	1033	13
830 ASHTON-TATE	485	620	307	15	47.8	11	15.5	16.1	22.0	22.2	293	39
831 McCLATCHY NEWSPAPERS	484	NR	356	7	28.8	21	8.1	7.2	11.3	11.5	344	6
832 COLEMAN	483	NR	658	10	24.5	28	3.7	3.2	10.8	12.0	435	8
833 DATA GENERAL	483	646	1330	2	-48.9	NM	NM	NM	NM	-8.1	1049	-3
834 FIRST PENNSYLVANIA	481	921	623	16	58.2	NM	9.3	NM	NA	20.7	6407	10
835 GATX	479	899	587y	7	47.0	35	8.0	6.3	8.6	NA	2605	18
836 OGILVY GROUP	479	878	838	13	33.0	11	3.9	4.0	19.8	18.0	854	8
837 FIRST OF AMERICA BANK	478	764	885	15	88.8	14	10.0	10.2	NA	14.7	9769	13
838 NATIONAL FUEL GAS	478	787	798	9	47.0	27	5.9	5.0	10.8	11.2	1291	9
839 FRUIT OF THE LOOM	477	908	1005	15	73.0	93	7.3	4.3	12.7	32.6	1810	12
840 PITTWAY	474	886	771	19	37.3	15	4.8	5.0	11.4	11.4	595	18
841 DIAMOND SHAMROCK R&M	473	NR	1804	4	54.3	472	3.0	0.5	13.1	15.3	843	2
842 WASHINGTON GAS LIGHT	473	925	698	2	45.1	14	6.5	5.8	9.0	11.4	923	12
843 CINTAS	467	867	225	23	19.3	26	8.5	8.4	13.5	15.5	200	15
844 BEVERLY ENTERPRISES	466	891	2025	-3	-23.9	NM	NM	NM	NM	-5.2	1844	-11
845 PUBLIC SERVICE CO. OF NEW MEXICO	465	606	792a	1	85.0	-39	10.7	17.9	7.7	7.7	2567	-5
846 SOUTH CAROLINA NATIONAL	464	839	552	13	54.5	3	9.9	10.8	24.6	14.2	5323	15
847 FIRST HAWAIIAN	464	NR	385	15	43.3	22	11.3	10.6	16.3	17.9	4239	8
848 HOME GROUP	462	847	2978y	19	81.4	-32	2.7	4.8	NM	8.3	13302	107
849 LYPHOMED	460	NR	128	-26	-21.1	NM	NM	12.2	NA	-16.0	263	-3
850 COSTCO WHOLESALE	459	957	2149	39	14.5	221	0.7	0.3	9.1	13.2	552	30
851 NORDSON	458	928	256	20	33.1	26	12.9	12.3	33.8	37.2	173	2
852 QUAKER STATE	458	707	869	-4	14.9	NM	1.7	NM	5.4	4.7	740	0
853 MORRISON KNUDSEN	458	865	1909	10	-37.0	NM	NM	NM	NA	-14.5	1746	125
854 BOB EVANS FARMS	456	807	412	6	31.3	14	7.6	7.0	NA	15.6	237	8
855 FIRST FLORIDA BANKS	456	845	479	10	48.9	1	10.2	11.1	18.4	13.0	5132	4
856 CHESAPEAKE	452	884	711	5	51.5	71	7.2	4.5	12.7	19.3	662	12
857 AAR	451	906	384	23	23.1	29	6.0	5.7	13.7	14.5	329	23
858 MORRISON	449	952	744y	19	28.9	24	3.9	3.7	15.3	16.5	291	5
859 ROWAN	449	733	217	51	-31.6	NM	NM	NM	NA	-6.3	801	-3
860 CARPENTER TECHNOLOGY	449	879	608	23	33.0	342	5.4	1.5	9.7	10.5	646	8
861 ALBERTO-CULVER	445	844	634	18	25.6	18	4.0	4.1	14.1	18.3	321	17
862 EL PASO ELECTRIC	443	765	384	14	29.6	-27	7.7	12.1	NA	3.0	2043	-8
863 RAMADA	437	NR	539a	8	4.4	NM	0.8	NM	3.2	1.5	1020	16
864 OLD REPUBLIC INTERNATIONAL	437	895	1102	1	51.0	-50	4.6	9.4	NA	NA	3006	7
865 ADOBE SYSTEMS	437	NR	83	112	21.1	135	25.3	22.8	46.7	47.6	65	103
866 NEW PLAN REALTY TRUST	435	933	39y	6	24.4	21	62.7	54.7	NM	15.1	190	2
867 FOREMOST CORP. OF AMERICA	435	739	460	-3	24.5	-26	5.3	7.0	NA	12.5	808	-14
868 MACK TRUCKS	433	826	2102	13	24.9	407	1.2	0.3	NA	4.9	1684	14
869 APPLIED BIOSYSTEMS	432	968	149	38	18.6	55	12.5	11.2	14.6	14.6	154	10
870 CILCORP	432	860	471	4	49.3	27	10.5	8.5	9.3	13.4	1096	2

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS. OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST 1989 \$	ESTIMATES VARI- ATION %	
21	23/21	131	9	7.52	69	3	27	23	29.7	12	2.11	2.28	2.25	3.0	Utilities A
23	24/20	146	9	4.70	42	9	23	21	28.1	12	2.33	2.60	2.85	1.7	Banks C
2	4/1	193	11	0.00	0	-7	26	228	47.2	12	0.08	0.19	NA	NM	Office equipment C
27	27/16	211	15	1.21	18	54	55	18	62.6	08	0.87	1.79	2.06	7.1	Health care A
19	31/19	225	10	0.00	0	-20	75	26	440.9	01	1.70	1.83	2.28	9.2	Office equipment C
17	18/13	193	17	0.53	9	2	7	29	10.1	12	0.91	1.02	1.13	2.6	Publishing/TV B
69	71/35	238	20	1.75	35	97	52	7	111.7	12	2.72	3.47	3.78	7.0	Leisure D
17	28/17	80	NM	0.00	0	-32	69	29	113.9	09	-3.07	-0.55	-0.08	691.1	Office equipment B
13	13/10	192	9	0.00	0	25	31	38	31.1	12	-2.17	1.36	1.44	6.8	Banks A
54	60/44	213	11	3.33	36	30	84	9	47.0	12	3.64	5.04	5.98	3.0	Transportation C
33	34/25	262	15	2.77	41	17	60	14	107.9	12	2.02	2.25	2.48	5.3	Services D
39	50/38	101	6	5.19	33	-11	42	12	39.6	12	5.62b	5.98	6.07	7.7	Banks B
18	21/17	114	11	6.86	76	0	28	26	20.7	09	1.49	1.65	1.83	4.8	Utilities B
8	9/4	213	7	0.00	0	33	25	62	63.8	12	0.52	1.19	0.89	6.2	Consumer A
104	104/80	145	13	1.74	22	27	41	5	13.2	12	7.05	8.13	NA	NM	Conglomerates
20	20/11	141	9	2.23	21	55	59	24	74.1	12	0.41	2.14	2.08	15.4	Fuel B
25	27/23	124	10	7.63	75	13	24	19	44.8	12	2.27	2.52	2.44	4.6	Utilities B
33	36/31	376	21	0.39	8	0	33	14	37.4	05	1.30	1.60d	1.93	1.3	Services E
9	9/4	98	NM	0.00	0	27	41	54	120.1	12	-0.58	-0.47	0.13	126.0	Health care C
11	19/11	49	7	13.66	91	-17	24	42	111.8	12	2.00	1.67d	1.76	16.3	Utilities A
21	24/20	121	9	2.99	26	3	26	22	29.6	12	2.44	2.51	2.79	1.9	Banks C
35	35/23	192	11	3.48	37	39	38	13	17.2	12	2.65	3.23	3.69	6.2	Banks D
14	14/11	47	6	1.48	8	5	47	34	52.8	12	3.34	2.38	2.08	16.3	Nonbank fin. B
15	17/8	347	NM	0.00	0	18	26	30	322.0	12	0.70	-0.70	0.42	48.7	Health care B
19	19/12	419	40	0.00	0	59	33	25	116.2	08	0.14	0.46	0.92	7.5	Retailing
48	50/35	514	16	1.33	21	37	16	10	27.0	10	2.35	3.11	3.69	2.9	Manufacturing C
17	27/16	146	30	4.60	140	-12	34	26	185.7	12	-1.82	0.57	1.11	29.0	Fuel B
41	44/35	179	NM	3.61	DEF	17	65	11	88.9	12	-1.64	-3.35	2.98	19.3	Services A
16	18/14	228	16	1.66	26	5	22	29	31.9	04	1.00	1.12d	1.24	3.7	Leisure A
28	29/25	122	9	2.97	27	13	29	16	30.2	12	2.99b	3.01d	3.28	2.4	Banks C
22	22/18	170	9	2.53	22	10	48	20	24.5	12	1.47	2.51	2.79	6.1	Paper B
28	28/21	284	19	1.55	29	26	70	16	57.7	05	1.34	1.51	1.88	5.5	Services B
25	25/19	257	14	2.40	34	28	38	18	72.2	05	1.49	1.76d	2.04	2.8	Leisure A
6	9/5	89	NM	0.00	0	-15	67	72	71.6	12	-1.07	-0.44	-0.12	177.9	Fuel C
49	53/42	143	18	4.29	79	17	70	9	39.8	06	0.50	2.67	4.38	9.6	Metals B
34	38/28	318	17	1.06	18	24	17	13	23.5	09	1.28	1.99	2.17	2.9	Consumer D
13	16/11	76	25	12.04	304	-9	31	35	75.1	12	0.79	0.50	1.83	10.8	Utilities A
11	11/6	143	87	0.00	0	53	23	40	138.4	12	0.15	0.13d	0.31	36.4	Leisure C
25	28/21	78	6	2.93	17	21	56	17	53.2	12	NA	2.10c	3.89	4.4	Nonbank fin. B
21	26/15	986	22	0.38	8	40	48	21	306.3	11	0.43	0.98	1.38	6.5	Office equipment C
16	17/14	268	18	6.00	109	20	20	27	12.0	07	0.80	0.88	1.01	6.8	Housing B
36	44/33	221	18	3.01	54	-2	71	12	48.0	12	2.82	1.99	3.13	10.8	Nonbank fin. B
15	17/12	85	17	0.00	0	-4	40	30	40.7	12	0.13	0.84	1.41	16.4	Automotive A
32	32/21	339	25	0.00	0	6	34	14	128.3	06	0.70	1.25	1.44	3.0	Electrical C
32	35/30	129	10	7.69	74	10	32	14	17.4	12	2.52	3.31	3.31	3.2	Utilities A



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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
871 J. M. SMUCKER	432	729	353	15	26.8	24	7.6	7.0	18.9	19.8	188	16
872 CENTRAL FIDELITY BANKS	432	857	446	10	49.5	5	11.1	11.6	19.7	14.8	4731	10
873 LEGGETT & PLATT	430	820	810	19	37.7	-2	4.7	5.7	NA	15.7	478	20
874 A. G. EDWARDS	429	940	475y	-13	29.2	-38	6.1	8.6	10.8	10.0	1029	21
875 ROLLINS	428	918	381	7	24.7	12	6.5	6.2	40.5	40.5	147	12
876 KINDER CARE	426	713	935y	85	43.3	65	4.6	5.2	22.4	11.0	6087	189
877 MOHASCO	425	863	804a	0	-0.6	NM	NM	1.5	-0.6	-10.7	639	66
878 ARVIN INDUSTRIES	424	883	1313	0	16.5	-65	1.3	3.6	4.9	3.6	1058	31
879 ARMOR ALL PRODUCTS	424	880	148	36	25.6	37	17.3	17.1	NA	29.3	108	28
880 TCA CABLE TV	423	907	71	14	10.6	82	14.9	9.3	13.9	17.8	135	-2
881 TIFFANY	422	NR	290	26	24.9	48	8.6	7.3	NA	29.8	163	28
882 ALBANY INTERNATIONAL	421	974	461	15	36.3	44	7.9	6.3	14.1	22.2	477	14
883 A. L. WILLIAMS	417	869	402y	44	96.1	151	23.9	13.8	34.2	49.7	592	25
884 SHARED MEDICAL SYSTEMS	416	665	379y	-3	29.4	-35	7.8	11.6	17.1	17.3	282	-12
885 LSI LOGIC	415	885	379	45	23.8	122	6.3	4.1	4.9	7.5	715	14
886 MERCANTILE BANCORPORATION	414	967	673	0	28.7	NM	4.3	NM	NA	6.7	6459	-1
887 GERBER SCIENTIFIC	413	852	288	13	31.7	13	11.0	11.0	18.6	19.3	238	-4
888 FIRST ILLINOIS	413	NR	182	16	29.2	28	16.0	14.6	NA	NA	1635	11
889 INTERLAKE	413	802	892	8	39.6	-27	4.4	6.6	NA	14.8	660	-5
890 COMMERCE BANCSHARES	412	981	479	6	49.0	22	10.2	8.9	NA	12.9	5444	3
891 FIRST FINANCIAL MANAGEMENT	412	772	424y	142	29.3	152	6.9	6.6	7.8	12.0	525	192
892 U. S. TRUST	411	815	362	7	30.6	-11	8.5	10.2	18.2	15.7	3061	20
893 EASTERN UTILITIES ASSOCIATES	411	NR	374	2	40.4	-15	10.8	13.0	11.5	12.4	1209	13
894 SUMMIT BANCORPORATION	411	941	329	17	38.7	11	11.8	12.5	NA	NA	3526	15
895 CENTEX	409	NR	1730y	26	31.9	22	1.8	1.9	8.2	8.5	1045	1
896 DENNISON MFG.	408	873	722	2	38.1	9	5.3	4.9	14.3	16.0	482	-3
897 SAN JUAN BASIN ROYALTY TRUST	408	938	15a	-15	15.1	-15	97.8	97.5	NM	15.3	99	-3
898 INTERTAN	408	NR	613	19	31.5	5559	5.1	0.1	15.7	19.5	373	14
899 FIRST TENNESSEE NATIONAL	405	902	611	7	52.3	54	8.6	5.9	NA	14.4	5972	2
900 NEW PROCESS	403	NR	418	15	34.1	51	8.2	6.2	NA	33.3	157	16
901 COLLINS FOODS INTERNATIONAL	402	954	531	-9	28.8	39	5.4	3.6	NA	13.4	381	-18
902 RELIANCE GROUP HOLDINGS	401	731	3730	11	23.6	-81	0.6	3.7	NM	6.2	9000	25
903 TOPPS	400	NR	183	13	23.7	-1	12.9	14.8	55.5	-32.9	106	2
904 FIRST CITY BANCORP. OF TEXAS††	399	NR	865	NA	66.1	NA	7.6	NA	1.8	11.1	12195	NA
905 DAUPHIN DEPOSIT	395	983	298	9	40.7	11	13.6	13.5	18.2	15.5	3336	10
906 GOULDS PUMPS	395	966	454	18	23.3	26	5.1	4.8	12.3	12.0	366	7
907 STRYKER	394	959	179	21	15.9	25	8.9	8.6	18.0	18.3	125	19
908 MIDWEST ENERGY	394	896	570	6	43.9	17	7.7	7.0	9.9	14.7	1092	1
909 CENTRAL MAINE POWER	394	911	654	4	45.8	-1	7.0	7.4	NA	11.7	1211	10
910 DIVERSIFIED ENERGIES	393	855	769	17	32.3	14	4.2	4.3	9.7	12.0	819	3
911 BRIGGS & STRATTON	392	836	903	4	14.2	-53	1.6	3.5	NA	5.0	621	19
912 APPLIED MATERIALS	392	881	405	100	47.8	534	11.8	3.7	NA	23.8	339	46
913 KANSAS CITY SOUTHERN INDUSTRIES	392	846	507	0	-46.3	NM	NM	6.3	-4.9	-14.1	917	0
914 IOWA RESOURCES	392	813	348	2	33.8	-19	9.7	12.2	7.1	9.4	1198	4
915 FIRST MISSISSIPPI	392	NR	332	2	25.3	-15	7.6	9.1	12.0	13.0	428	54

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT. MIL.	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST 1989 \$	ESTIMATES VARI- ATION %	
59	63/48	320	19	1.50	28	16	47	7	17.9	04	3.12	3.68d	4.18	2.1	Food B
28	30/25	129	9	4.14	36	4	20	15	24.5	12	3.01	3.20	3.50	2.7	Banks C
25	31/22	179	11	2.85	33	-3	47	17	21.5	12	2.28	2.21	2.28	16.0	Consumer B
21	23/15	147	12	3.26	39	24	38	21	45.2	02	1.73	1.71d	1.89	14.8	Nonbank fin. A
18	19/15	701	18	2.87	50	9	37	24	19.9	06	0.85	1.03	1.22	7.7	Services E
8	12/7	109	10	1.03	10	-36	40	55	107.8	12	0.57	0.80	0.91	22.2	Services E
32	36/26	7053	15	0.88	13	9	NA	13	77.7	12	0.92	2.15d	2.40	NM	Consumer B
23	26/18	117	33	2.99	97	10	44	19	81.8	12	2.39b	0.70	1.97	14.3	Automotive B
20	24/16	485	19	2.57	49	30	14	21	20.1	03	1.07	1.30d	1.56	1.9	Services E
35	36/28	711	44	1.14	51	17	32	12	55.7	10	0.46	0.79	1.68	62.1	Publishing/TV A
42	45/26	506	17	0.48	8	59	52	10	91.5	01	1.76	2.44	2.81	4.8	Retailing
17	20/13	257	12	1.78	21	29	24	25	52.2	12	1.15	1.46	1.77	1.5	Manufacturing D
17	19/12	216	8	0.00	0	-8	40	25	58.9	12	1.55	2.14	2.34	6.5	Nonbank fin. B
18	26/14	244	14	4.67	67	-28	73	23	164.4	12	1.80	1.25	1.40	9.6	Office equipment C
10	14/8	130	18	0.00	0	18	51	40	230.5	12	0.27	0.58	1.00	11.4	Electrical D
26	31/21	97	14	5.44	78	33	42	16	63.1	12	-1.53	1.79	2.91	9.0	Banks B
17	21/16	252	15	0.69	10	0	63	24	56.0	04	1.15	1.37d	1.69	7.9	Office equipment C
16	16/10	NA	14	2.71	39	NA	16	25	NA	12	0.88	1.13	1.37	4.1	Banks B
41	47/39	155	11	3.68	40	0	54	10	52.0	12	4.69	3.75	4.17	5.0	Manufacturing C
43	43/32	109	9	2.82	24	31	31	10	16.1	12	3.89	4.92	5.26	2.3	Banks B
26	34/24	169	14	0.00	0	-9	64	16	174.5	12	1.16	1.81	2.30	7.2	Office equipment C
42	49/36	211	14	2.75	39	3	52	10	102.3	12	3.34	3.01	3.60	2.6	Banks A
31	33/21	136	11	7.80	84	42	52	13	119.2	12	3.46	2.85	3.25	9.9	Utilities A
21	24/18	NA	11	3.47	43	NA	15	20	NA	12	1.69	1.88	2.09	1.9	Banks A
28	30/20	109	19	0.89	17	31	65	15	88.0	03	1.50	2.41d	3.20	16.7	Housing B
26	28/24	173	11	5.00	55	3	45	15	25.2	12	2.22	2.41	2.57	2.9	Office equipment A
9	9/6	413	NA	2.80	NA	16	89	47	21.0	12	0.38	NA ^d	NA	NM	Fuel B
47	47/21	252	19	0.00	0	105	64	9	71.6	06	-1.41	2.49	3.62	20.3	Consumer B
26	29/22	111	8	5.46	42	6	44	16	38.4	12	2.19	3.34	3.66	1.3	Banks C
37	43/23	393	10	5.89	58	66	34	11	19.2	12	2.42	3.71	4.20	1.7	Retailing
18	19/13	187	16	0.90	15	27	58	23	52.8	04	1.10	1.25d	1.43	3.0	Leisure A
5	8/4	106	17	5.95	100	-13	8	75	10.8	12	1.68	0.32	0.60	44.1	Nonbank fin. B
29	30/12	NEG	15	1.39	21	71	15	14	52.7	02	1.89	1.98d	2.35	NM	Publishing/TV B
29	69/21	95	11	0.00	0	-14	40	14	30.5	12	NA	2.73	3.93	16.6	Banks D
31	34/27	151	10	4.25	41	13	21	13	21.1	12	2.97	3.14	3.45	1.4	Banks A
19	23/17	203	16	3.92	64	1	59	20	80.1	12	1.03	1.18	1.49	4.2	Manufacturing C
25	25/19	455	25	0.00	0	12	65	16	35.1	12	0.82	1.02	1.23	1.9	Health care D
18	20/18	147	10	8.55	85	6	6	22	23.9	12	1.53	1.83	1.83	4.8	Utilities A
17	19/16	110	9	8.81	83	13	23	23	38.5	12	1.79	1.83	2.03	2.5	Utilities A
25	29/24	147	12	6.17	76	-5	30	16	43.4	12	1.70	2.00	2.20	5.6	Utilities B
27	36/27	139	13	5.90	77	-1	63	14	53.0	06	1.84	2.09	1.26	37.9	Manufacturing C
25	36/17	195	10	0.00	0	-10	74	16	405.8	10	0.02	2.43	3.12	7.3	Manufacturing C
38	59/33	119	NM	2.86	DEF	-15	51	10	77.0	12	3.30	-4.51	2.73	27.6	Transportation B
18	22/15	111	12	9.35	111	-6	19	22	26.3	12	1.84	1.49	1.81	5.8	Utilities A
20	20/12	201	12	1.54	19	34	40	20	92.0	06	0.93	1.61	1.42	13.1	Chemicals

10 TABLES APPEAR ON PAGES 218-219



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	MARKET VALUE		SALES		PROFITS						ASSETS	
	\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS		RETURN		12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %
							12 MONTHS 1988 %	12 MONTHS 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
916 FIRST EMPIRE STATE	391	930	537	15	44.5	10	8.3	8.6	14.6	11.7	5908	14
917 EDISON BROTHERS STORES	391	NR	919	-1	36.3	NM	4.0	NM	NM	19.0	513	22
918 BANCO POPULAR DE PUERTO RICO	390	NR	552	21	47.4	24	8.6	8.4	NA	13.9	5707	6
919 PIER 1 IMPORTS	390	NR	388	23	19.9	23	5.1	5.1	12.5	17.8	286	18
929 WICKES	387	790	3985a	6	-46.1	NM	NM	1.1	NM	-4.4	3918	-3
921 NCH	386	896	545	13	34.9	30	6.4	5.5	17.1	18.3	345	9
922 MERCHANTS NATIONAL	385	960	452	17	44.1	202	9.8	3.8	24.9	13.5	5256	25
923 HECLA MINING	385	947	102	17	16.6	61	16.2	11.9	NA	11.7	189	7
924 ZENITH NATIONAL INSURANCE	384	920	509	8	45.4	5	8.9	9.2	15.1	15.5	1007	10
925 U. S. SURGICAL	382	903	291	15	23.2	15	8.0	8.0	13.2	17.9	264	8
926 FOXBORO	382	945	540	7	9.8	NM	1.8	NM	NM	5.3	443	-4
927 FRED MEYER	381	NR	2074	12	36.7	14	1.8	1.7	10.8	15.1	687	10
928 PARK COMMUNICATIONS	380	904	160	7	19.1	12	11.9	11.4	NA	11.8	248	6
929 NATIONAL COMMUNITY BANK OF N. J.	379	NR	321	29	42.0	22	13.1	13.9	NA	NA	3614	15
930 W. R. BERKLEY	378	995	534	2	58.8	9	11.0	10.4	16.6	19.9	1201	16
931 MINNETONKA	377	NR	214	40	15.8	56	7.4	6.6	NA	26.3	149	66
932 NATIONAL INTERGROUP	377	866	2975	-22	-39.7	NM	NM	NM	NM	-6.6	1824	-9
933 SHAW INDUSTRIES	376	NR	1120	49	40.3	46	3.6	3.7	14.7	23.7	496	-1
934 MAGMA POWER	376	NR	26y	34	9.3	132	35.7	20.7	6.6	7.5	229	57
935 UTILICORP UNITED	376	NR	673	13	40.9	23	6.1	5.6	10.4	12.1	1005	7
936 UNITED STATIONERS	375	980	894	17	24.6	49	2.7	2.2	NA	15.6	381	19
937 A. SCHULMAN	375	948	616	23	28.6	33	4.6	4.3	17.2	18.1	281	11
938 BANK SOUTH	375	964	482	15	43.4	48	9.0	7.0	25.4	15.6	4881	11
939 SEALED AIR	375	932	346	14	25.3	24	7.3	6.7	NA	16.5	256	12
940 RIGGS NATIONAL	374	NR	562	17	37.0	3554	6.6	0.2	13.9	10.9	6756	10
941 CHAPARRAL STEEL	374	NR	408	19	45.1	116	11.1	6.1	22.4	32.4	356	NA
942 ALASKA AIR GROUP	374	NR	814	15	37.5	181	4.6	1.9	10.4	12.4	730	3
943 CYPRESS SEMICONDUCTOR	373	861	139	80	20.8	81	14.9	14.9	11.5	11.7	245	13
944 TRUSTCORP	371	NR	563	10	1.3	-97	0.2	9.4	NA	-0.7	5947	10
945 GIBSON GREETINGS	371	NR	404	12	35.0	45	8.7	6.7	20.7	20.4	326	13
946 SYSTEMATICS	368	992	194	21	17.1	31	8.8	8.1	24.0	24.5	109	-7
947 ASSOCIATED COMMUNICATIONS	367	NR	16	88	-7.9	NM	NM	342.3	NM	-28.4	49	-8
948 GOLDEN NUGGET	367	NR	162a	-35	-5.2	NM	NM	52.7	NM	-2.7	1059	49
949 UNITED TELEVISION	366	NR	101	5	7.9	19	7.8	6.9	12.9	14.0	193	3
950 CHURCH'S FRIED CHICKEN	364	NR	420y	6	-14.5	NM	NM	2.4	NM	-5.9	324	-7
951 INTERNATIONAL MULTIFOODS	364	827	1847	14	35.9	25	1.9	1.8	10.2	11.5	855	5
952 MCH	363	NR	1281	3	47.7	2	3.7	3.8	12.8	19.3	1281	4
953 CB&T BANKSHARES	361	915	250	10	26.8	14	10.8	10.3	NA	NA	1957	11
954 POLICY MANAGEMENT SYSTEMS	361	888	217	21	20.5	20	9.4	9.5	NA	14.3	289	3
955 THERMO ELECTRON	360	NR	501	31	20.1	11	4.0	4.7	8.4	11.7	474	15
956 CETUS	360	931	31	-26	-39.6	NM	NM	NM	NA	-30.7	260	-10
957 ROSS STORES	359	NR	634y	10	26.3	127	4.1	2.0	21.4	19.7	251	6
958 PUGET SOUND BANCORP	359	NR	395	11	40.4	118	10.2	5.2	11.7	15.0	3947	11
959 CPI	358	969	313a	11	27.3	22	8.7	8.0	NA	21.8	181	14
960 WESTERN PUBLISHING GROUP	358	NR	543a	29	28.9	71	5.3	4.0	NA	18.1	356	10

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %		1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' ESTIMATES 1989 EST \$	VARI- ATION %	
56	57/47	103	9	1.79	17	15	37	7	33.9	12	4.78	6.02	7.01	4.7	Banks A
39	39/26	205	11	4.62	49	39	46	10	26.1	12	-2.11	3.64	4.00	7.7	Retailing
39	39/28	114	8	3.90	32	32	NA	10	13.5	12	3.83	4.74	NA	NM	Banks C
13	14/7	353	25	0.93	23	47	37	30	90.4	02	0.52	0.68d	0.85	3.6	Consumer B
8	14/7	33	9	0.00	0	-23	NA	48	170.6	01	0.77	0.92d	0.93	49.7	Conglomerates
43	46/36	202	13	1.67	22	15	29	9	29.1	04	3.29	4.00d	NA	NM	Consumer D
26	28/22	118	9	3.81	33	9	50	15	29.8	12	1.17	3.05	3.44	2.2	Banks B
14	18/12	272	23	0.35	8	4	24	27	78.7	12	0.38	0.61	0.68	24.3	Metals C
18	22/15	131	9	4.44	38	22	51	21	26.9	12	1.89	2.11	2.34	7.8	Nonbank fin. B
34	35/28	295	17	1.79	30	4	51	11	44.0	12	1.63	2.00	2.32	1.5	Health care D
31	33/25	206	39	0.32	13	22	68	12	26.0	12	-7.87	0.80	2.10	23.2	Electrical C
17	18/13	157	11	0.00	0	28	21	22	35.3	01	1.31	1.50	1.68	2.4	Retailing
28	30/25	235	20	0.00	0	7	10	14	6.1	12	1.24	1.38	1.63	2.2	Publishing/TV B
36	43/33	NA	9	3.52	32	0	NA	10	11.7	12	3.34	4.05	4.60	0.0	Banks A
31	33/24	128	7	1.16	8	9	55	12	84.5	12	4.07	4.67	4.88	16.1	Nonbank fin. B
24	24/11	628	25	0.00	0	18	44	16	163.1	12	0.57	0.94	1.13	4.0	Consumer D
17	21/13	55	NM	1.44	DEF	-1	54	22	109.8	03	-1.25	0.29d	1.53	22.1	Conglomerates
25	27/18	221	12	3.25	38	40	41	15	40.1	06	1.70	2.13	2.84	4.7	Manufacturing D
17	19/11	303	40	0.00	0	65	23	22	17.6	12	0.20	0.43	NA	NM	Utilities A
18	20/17	119	9	7.36	69	10	16	21	26.2	12	1.80	1.94	2.14	2.1	Utilities A
24	25/18	238	16	1.32	21	25	55	15	70.1	08	0.99	1.50	1.78	1.4	Services B
28	31/23	238	14	1.43	19	18	51	14	49.1	08	1.47	2.06	2.33	2.1	Chemicals
11	13/10	135	9	3.96	34	-4	13	34	15.0	12	0.94	1.28	1.43	1.9	Banks C
46	50/40	245	15	1.40	21	17	63	8	33.3	12	2.60	3.10	3.54	2.6	Manufacturing A
26	26/20	110	10	4.31	43	19	17	15	17.1	12	0.07	2.54	2.81	2.6	Banks A
13	16/10	269	9	0.60	47	3	11	30	18.0	05	NA	1.61c	1.78	8.7	Metals B
24	25/16	124	10	0.84	8	37	63	16	156.8	12	0.85	2.37	2.53	7.8	Transportation A
10	13/8	209	18	0.00	0	-5	61	36	119.3	12	0.32	0.56	0.76	5.5	Electrical D
23	27/20	99	NM	6.67	DEF	3	30	16	55.7	12	3.19	-0.13	3.59	4.6	Banks B
24	26/15	216	11	1.26	13	55	84	16	197.2	12	1.53	2.25	2.44	4.8	Leisure D
34	34/26	529	20	1.19	24	20	34	11	53.3	05	1.39	1.68d	2.04	2.5	Office equipment C
32	34/13	1320	NM	0.00	0	113	NA	12	45.2	12	1.59	-0.43	NA	NM	Telecomms. A
18	19/10	195	59	0.00	0	87	20	20	95.1	12	4.16	0.31d	0.87	46.7	Leisure C
34	34/25	645	46	0.00	0	9	33	11	12.3	12	0.61	0.73	NA	NM	Publishing/TV A
10	10/6	150	NM	1.98	DEF	39	51	36	152.2	12	0.26	-0.40	0.31	43.6	Leisure A
28	34/26	117	13	4.16	52	1	59	13	71.7	02	2.26	2.45d	2.76	3.0	Food B
18	20/17	147	8	8.94	68	NA	NA	21	NA	12	2.28	2.32	2.08	13.2	Utilities B
12	15/12	NA	13	2.55	34	NA	4	31	NA	12	0.77	0.87	0.99	2.50	Banks C
23	27/21	253	18	0.00	0	6	88	16	109.4	12	1.05	1.30	1.60	2.6	Nonbank fin. A
21	22/15	209	18	0.00	0	32	35	17	32.7	12	1.00	1.15	1.39	2.7	Services A
14	15/10	279	NM	0.00	0	-20	22	27	135.6	06	-1.29	-0.86	-1.76	15.7	Health care B
14	14/5	350	14	0.00	0	121	40	26	127.9	01	0.41	0.97d	1.10	8.0	Retailing
22	22/18	133	9	4.00	35	20	37	16	41.0	12	1.17	2.50	2.64	8.8	Banks D
22	22/17	286	13	1.83	24	13	61	16	117.8	01	1.46	1.68d	1.97	3.8	Leisure D
18	25/14	229	12	0.00	0	23	50	20	182.7	01	1.08	1.48d	1.41	4.9	Publishing/TV B

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THE TOP 1000

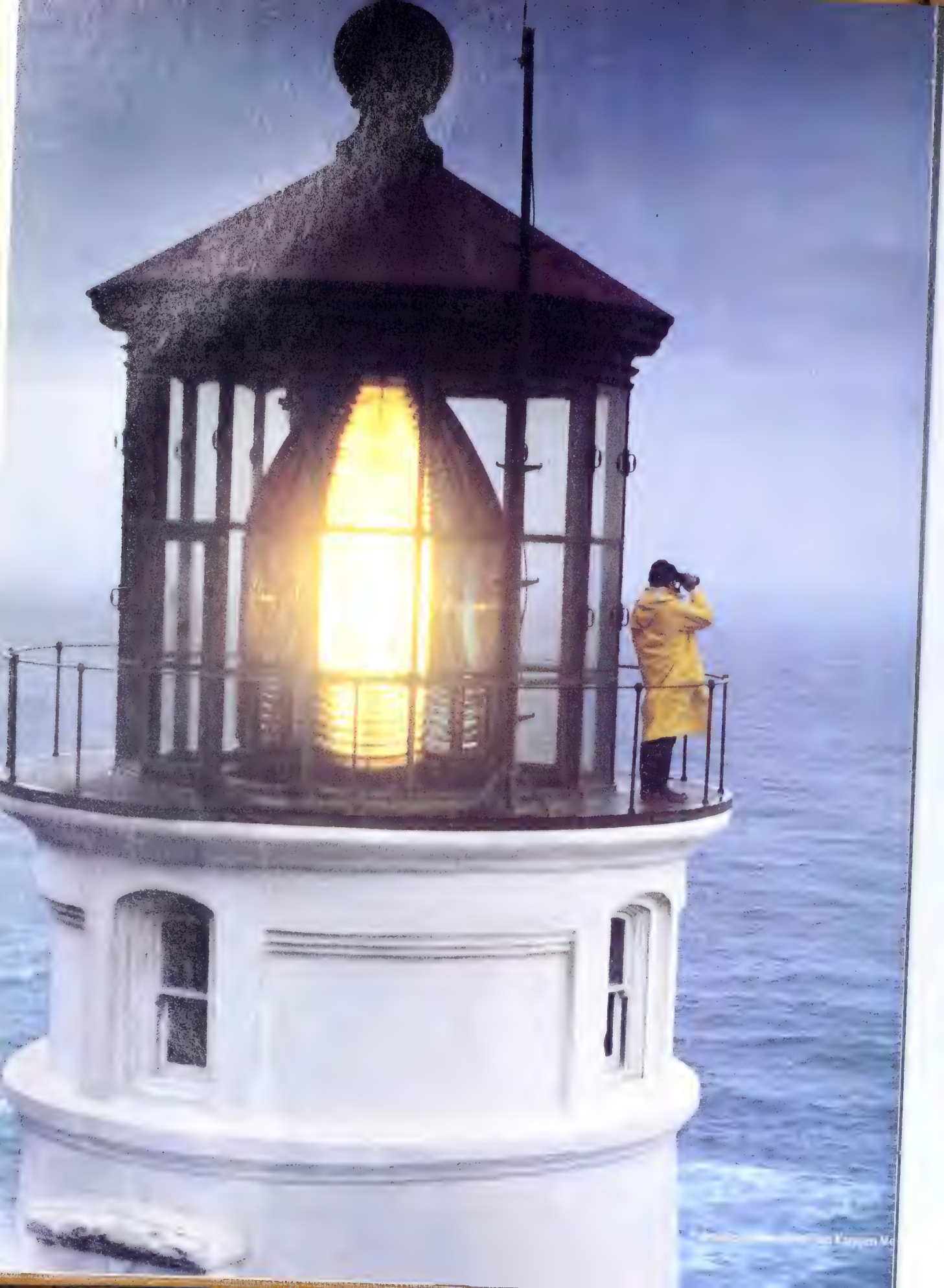
		MARKET VALUE												SALES		PROFITS						ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	MARGINS 12 MONTHS 1988 %	12 MONTHS 1987 %	RETURN ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %										
961	DANAHER	357	NR	716y	16	40.0	96	5.6	3.3	13.5	27.4	596	-21										
962	CENTRAL LOUISIANA ELECTRIC	356	950	301	-1	43.1	-4	14.3	14.8	10.3	13.7	890	3										
963	WEINGARTEN REALTY INVESTORS	356	978	65	6	21.3	20	33.0	29.0	NM	20.8	350	5										
964	DSC COMMUNICATIONS	356	NR	340	28	20.0	3057	5.9	0.2	8.7	8.9	429	17										
965	WATTS INDUSTRIES	355	NR	206	26	21.5	26	10.5	10.4	15.1	16.7	194	17										
966	KIMBALL INTERNATIONAL	355	853	546	8	31.6	-9	5.8	6.8	13.1	13.4	328	2										
967	UNITED MISSOURI BANCSHARES	355	971	334	16	34.5	7	10.3	11.3	NA	11.4	3714	5										
968	ORANGE & ROCKLAND UTILITIES	355	917	487	8	44.6	7	9.2	9.2	10.0	13.6	922	5										
969	CAESARS NEW JERSEY	354	NR	340	6	35.1	38	10.3	7.9	21.7	21.3	266	0										
970	TERADYNE	353	926	462	22	-3.3	NM	NM	NM	NM	-1.1	434	9										
971	JWP	352	NR	925	45	27.8	25	3.0	3.5	NA	20.0	636	36										
972	IDEAL BASIC INDUSTRIES	352	732	228	-3	-19.7	NM	NM	NM	NA	-61.1	349	7										
973	NEW ENGLAND BUSINESS SERVICE	352	832	231	14	22.8	4	9.9	10.8	21.4	22.5	130	9										
974	SOUTHERN INDIANA GAS & ELECTRIC	351	NR	313	13	38.2	15	12.2	12.0	10.5	15.4	699	6										
975	CONSOLIDATED STORES	351	NR	627	6	22.6	74	3.6	2.2	12.3	16.5	332	7										
976	INTERNATIONAL DAIRY QUEEN	351	NR	242	15	20.1	35	8.3	7.1	25.0	34.8	115	-3										
977	U. S. HEALTHCARE	350	935	720	20	5.3	405	0.7	0.2	3.8	3.8	271	4										
978	RPM	349	976	361	11	23.4	16	6.5	6.2	12.6	15.9	275	11										
979	FIRST UNION REAL ESTATE	347	909	73y	-1	23.4	-10	31.9	35.2	NM	24.4	377	1										
980	IMO INDUSTRIES	347	NR	687	87	28.3	51	4.1	5.1	7.6	10.0	756	25										
981	HON INDUSTRIES	347	955	532	3	25.8	10	4.8	4.5	14.1	19.8	276	11										
982	OSHKOSH B'GOSH	346	874	253	12	18.8	-21	7.4	10.6	18.7	19.2	147	33										
983	SYMBOL TECHNOLOGIES	346	912	93a	59	20.6	118	22.2	16.3	16.9	17.6	140	24										
984	UNITED ILLUMINATING	344	NR	519	4	78.6	809	15.2	1.7	10.9	14.2	2365	9										
985	MDU RESOURCES GROUP	342	989	344	6	34.9	25	10.2	8.6	8.2	12.1	977	2										
986	TELECREDIT	342	818	156	12	1.0	-92	0.7	9.7	NA	1.6	107	22										
987	BIG BEAR	340	NR	955	9	15.3	6	1.6	1.6	13.8	13.8	250	10										
988	CHICAGO MILWAUKEE	340	962	42y	-59	16.2	-48	38.6	30.5	4.2	4.2	382	-4										
989	SCIENTIFIC-ATLANTA	340	936	510	-1	31.8	12	6.2	5.5	12.8	12.7	329	9										
990	JERRICO	340	NR	647	5	18.4	-24	2.8	3.9	NA	7.9	432	7										
991	DRESS BARN	340	NR	228	21	17.6	22	7.7	7.7	28.7	28.7	96	33										
992	ATARI	339	840	452	25	39.4	-15	8.7	12.9	15.6	22.7	464	37										
993	HOME BENEFICIAL	338	NR	188	2	42.5	12	22.6	20.6	NA	NA	1069	5										
994	KELLWOOD	336	NR	724	8	32.0	10	4.4	4.4	15.3	17.9	417	10										
995	CHEMED	336	NR	501	28	20.6	1	4.1	5.2	13.4	17.7	323	22										
996	TELEFLEX	336	NR	328y	21	24.0	22	7.3	7.2	15.1	18.4	242	10										
997	SAVANNAH FOODS & INDUSTRIES	334	NR	917	4	20.1	43	2.2	1.6	13.1	16.0	395	10										
998	FOREST CITY ENTERPRISES	334	NR	90a	-15	3.0	-42	3.4	4.9	4.0	3.3	399	11										
999	WESTERN DIGITAL	333	821	973	70	48.3	11	5.0	7.6	NA	16.6	604	64										
1000	VERMONT AMERICAN	332	NR	330	13	16.8	-9	5.1	6.3	11.1	13.0	241	15										

(a) Latest available data. (b) Actual and estimated figures are fully diluted. (c) Estimated earnings data. (d) Earnings data from Institutional Brokers Estimate System. (x) Sales include excise taxes. (y) Sales include other income. (z) Sales include excise taxes and other income. NA=not available. NM=not meaningful. NR=not ranked in Top 1000 in 1988. NEG=negative book value per share. DEF=earnings deficit in dividend payout. † Because BUSINESS WEEK is owned by McGraw-Hill, the Top 1000 does not include a forecast of the company's earnings. †† Data do

VALUATION				DIVIDENDS			SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
RECENT SHARE PRICE \$	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P-E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1987 ACTUAL \$	1988 ACTUAL \$	ANALYSTS' EST 1989 EST \$	ESTIMATES VARI- ATION %	
15	20/10	245	9	0.00	0	31	22	25	54.5	12	0.92	1.68	2.20	9.0	Automotive B
32	34/31	121	9	7.31	65	2	36	11	38.1	12	3.52	3.59	3.55	2.7	Utilities A
26	28/25	347	17	6.59	110	14	33	14	27.3	12	1.28	1.53	NA	NM	Housing B
9	9/6	158	19	0.00	0	20	58	39	187.7	12	0.35	0.48	0.70	17.0	Telecomms. A
28	29/22	276	19	0.57	11	25	42	13	41.6	06	1.15	1.50	1.85	NM	Manufacturing A
17	21/15	151	10	3.10	31	-1	20	21	15.3	06	1.40	1.68	1.55	14.5	Consumer B
27	27/24	117	10	2.42	25	2	9	13	4.5	12	2.43	2.59	2.75	1.2	Banks B
28	31/28	120	9	8.11	71	-2	13	13	17.0	12	2.93	3.18	3.06	1.4	Utilities A
22	24/16	215	11	0.00	0	28	7	16	6.4	07	1.11	2.00	2.25	6.7	Leisure C
12	18/11	122	NM	0.00	0	-11	73	29	77.8	12	-0.76	-0.11	0.89	19.5	Electrical C
28	28/18	254	13	0.00	0	35	29	13	69.3	12	1.80	2.22	2.74	4.0	Services E
2	3/2	1092	NM	0.00	0	-27	6	176	6.6	12	-0.06	-0.11	NA	NM	Housing A
21	28/20	347	16	3.51	55	-16	70	17	60.7	06	1.12	1.30	1.45	2.4	Office equipment A
28	30/26	147	10	6.37	61	11	20	12	32.0	12	2.57	2.96	2.79	2.5	Utilities A
8	8/4	257	16	0.00	0	54	40	45	63.1	01	0.29	0.50	0.63	5.8	Retailing
37	39/25	607	18	0.00	0	48	32	9	24.2	11	1.54	2.09	2.40	2.1	Leisure A
9	9/4	253	73	1.83	133	4	68	40	158.1	12	0.02	0.12	0.44	26.2	Health care C
16	18/14	237	14	4.00	56	8	33	22	59.5	05	0.95	1.11d	1.25	3.0	Housing A
20	23/18	362	15	7.64	115	-8	34	18	33.7	12	1.43	1.30	1.42	9.3	Housing B
20	23/16	122	11	1.62	18	16	59	18	61.9	12	1.32	1.78	2.09	6.0	Manufacturing C
20	21/16	267	15	2.40	35	0	21	17	21.8	12	1.24	1.38	1.75	5.2	Office equipment A
24	30/20	355	18	1.47	27	-2	64	15	117.4	12	1.64	1.29	1.89	8.0	Consumer A
19	27/15	295	18	0.00	0	-16	51	18	139.0	06	0.42	1.07	1.32	11.3	Office equipment B
25	28/19	73	5	9.37	48	31	36	14	49.7	12	5.99	4.85	6.08	16.4	Utilities A
18	20/18	122	10	7.89	78	3	23	19	33.0	12	1.46	1.81	1.88	5.1	Utilities A
32	46/26	517	NM	3.17	DEF	-25	52	11	248.7	04	-0.65	2.35d	2.67	2.3	Nonbank fin. A
38	38/20	307	21	0.00	0	91	61	9	113.6	08	1.50	1.81	2.20	4.5	Food C
139	167/130	97	23	0.00	0	10	36	2	29.2	12	12.70	5.95	NA	NM	Transportation B
14	16/10	136	11	0.84	10	4	50	24	98.5	06	1.04	1.25	1.39	2.4	Telecomms. A
18	18/13	145	19	0.91	18	15	65	19	235.5	06	1.19	0.91	1.38	3.3	Leisure A
15	16/10	555	21	0.00	0	4	57	22	108.0	07	0.58	0.71	0.88	3.3	Retailing
6	9/5	196	9	0.00	0	-23	10	58	31.0	12	0.76	0.68	1.12	31.5	Office equipment B
32	32/26	89	9	3.56	31	17	25	11	8.7	12	NA	3.95c	4.15	2.2	Nonbank fin. B
29	31/23	188	12	2.48	29	11	64	12	74.3	04	2.51b	2.71d	3.03	2.1	Consumer A
34	39/30	289	16	5.45	86	-3	62	10	37.8	12	2.15b	2.15	2.57	6.4	Consumer D
32	33/24	258	14	1.27	18	33	35	11	27.8	12	1.79	2.22	2.53	3.6	Manufacturing A
50	50/25	266	17	1.92	32	69	18	7	17.7	12	2.11	3.00	4.90	2.9	Food B
42	44/30	364	NA	0.90	NA	38	12	8	3.5	01	0.47	NA	NA	NM	Housing A
12	18/12	114	8	0.00	0	-16	56	29	97.5	06	1.78	1.51	1.80	7.8	Office equipment C
33	33/19	257	19	1.23	24	43	21	10	16.6	12	1.80	1.67	1.95	7.3	Manufacturing B

not include full 12-months' results. Data compiled by Standard & Poor's Compustat Services Inc. from sources such as statistical services, registration statements, and company reports that SPCS believes to be reliable but that are not guaranteed by SPCS or BUSINESS WEEK as to correctness or completeness. This material is not an offer to buy or sell any security. Additional data: Institutional Brokers Estimate System, Vickers Stock Research Corp.





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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

	COMPANY		MARKET VALUE		SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK		CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	

ALL-INDUSTRY COMPOSITE

2,390,950 11 3,361,296 11 199,531.6 12 6,673,149 11 14.5 15.0

1

AEROSPACE

INDUSTRY COMPOSITE	32495	17	92074	5	3102.4	12	64655	9	13.7	13.3	
1 BOEING	41	10382	35	16962	9	614.0	28	12608	0	11.2	11.6
2 UNITED TECHNOLOGIES	82	5819	6	18000	5	659.1	11	12748	-1	13.9	13.7
3 McDONNELL DOUGLAS	162	3412	38	15072	10	350.0	12	11885	39	14.6	11.5
4 LOCKHEED	207	2752	1	10590	-6	442.0	4	6643	3	NA	18.5
5 MARTIN MARIETTA	240	2370	-7	5727	11	319.8	39	3319	18	20.5	26.6
6 GENERAL DYNAMICS	257	2225	-7	9551	1	379.0	-13	6118	10	14.9	19.7
7 PARKER HANNIFIN	396	1353	-21	2397	15	108.4	19	1809	15	10.6	12.4
8 NORTHROP	411	1290	-10	5797	-4	104.2	11	3139	1	NA	-2.8
9 SUNDSTRAND	494	1026	2	1477	8	-50.1	NM	1567	4	NM	-10.2
10 GRUMMAN	636	704	-14	3649	8	86.5	220	2566	14	8.5	10.7
11 ROHR INDUSTRIES	725	588	40	960	24	34.6	40	1022	9	7.7	8.8
12 GENCORP	737	576	-13	1891	17	55.0	206	1230	11	15.4	NM

2

AUTOMOTIVE

INDUSTRY COMPOSITE		73977	11	292021	12	12644.8	14	390698	10	9.6	16.8	
2A CARS & TRUCKS												
GROUP COMPOSITE		59542	15	257634	13	11419.7	17	362751	11	9.4	17.2	
1	GENERAL MOTORS	6	25627	14	120388	7	4632.1	30	164063	1	7.7	13.0
2	FORD MOTOR	8	24479	11	92446	16	5300.2	15	143366	24	10.1	24.6
3	CHRYSLER	81	5847	7	35473	21	1050.2	-19	48567	14	NA	14.4
4	PACCAR	344	1672	25	3112	28	175.8	56	2832	18	18.8	19.3
5	NAVISTAR INTERNATIONAL	375	1484	0	4113	13	236.5	23	2239	15	30.0	34.2
6	MACK TRUCKS	868	433	-7	2102	13	24.9	407	1684	14	NA	4.9
2B PARTS & EQUIPMENT												
GROUP COMPOSITE		10244	2	22339	14	764.2	10	18582	3	14.6	10.4	
1	EATON	269	2104	1	3469	11	227.7	10	3034	-2	15.1	NA
2	DANA	359	1570	1	5190	17	162.2	28	4786	-3	16.0	16.9

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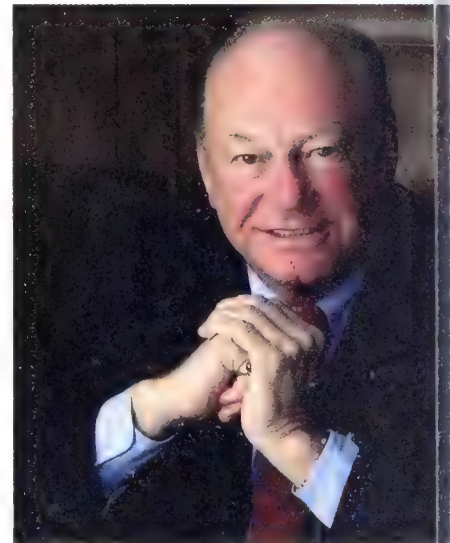
by Allen E. Paulson

**Chairman and Chief Executive Officer
Gulfstream Aerospace Corporation**

anything you ask of it. That maybe the Gulfstream IV could very well be all the business airplane you ever need to own.

Certainly, a business jet that can fly non-stop from Hobby to Shannon ought to be able to make a trip from, say, Palwaukee to Dulles and back in a single day. In the case of the Gulfstream IV, it can add several other airports to an itinerary like that, and go the whole day without refueling.

Those airports don't have to be major ones, either. The Gulfstream IV can get into and out of hundreds of places where you normally only find jets half its size. And that's not only because of



As a pilot, Allen Paulson has an innate understanding of aircraft design and performance. As an executive, his insights into successful corporate operations have made him an aerospace industry leader.



its performance, but also because it's a good neighbor.

Speaking of size, that's another reason the Gulfstream IV can do so much more than other business jets.

The Gulfstream IV is a big airplane, on purpose. It has a big, comfortable cabin that will hold a big payload of passengers and baggage. (Remember, it can take more people more places faster than any other jet designed for executive travel.)

It has big, reliable Rolls-Royce engines that also power airliners.

It has a big cockpit, with the biggest application of advanced flight systems technology in any business aircraft.

Everything about the Gulfstream IV seems to instill big confidence. (In our experience, people seldom pass up the opportunity to ride in it and pilots always want to fly one.)

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Executives have always preferred the spaciousness of the Gulfstream-size cabin, in which custom-designed interiors can be engineered to provide optimum comfort on flights of any duration.

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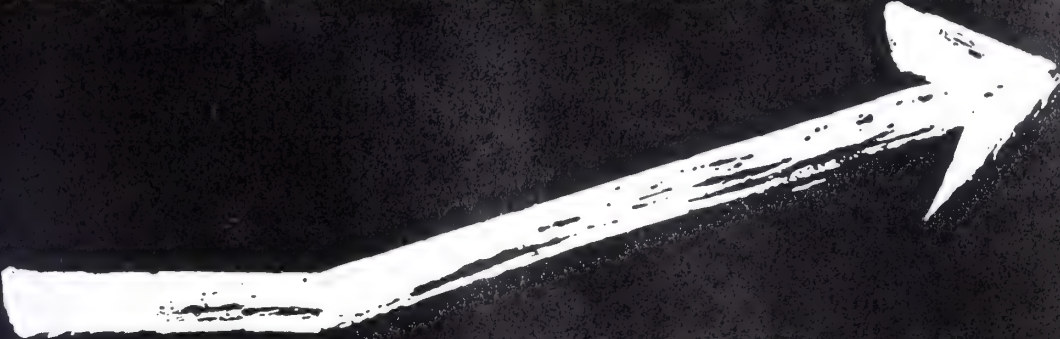
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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

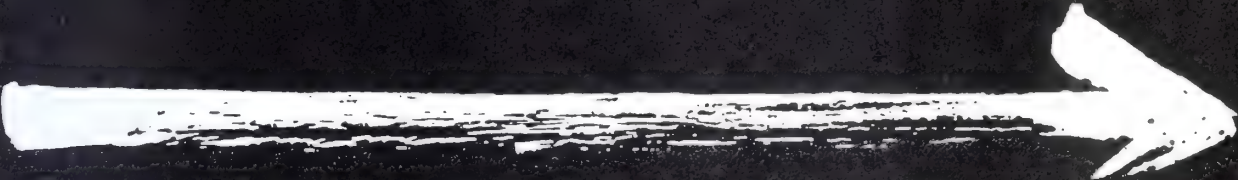
RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
3	TRINOVIA	515	969	-18	1919	14	87.8	21	1432	8	11.2	12.9
4	ECHLIN	534	919	6	1348	17	64.8	39	1110	22	9.1	10.1
5	MASCO INDUSTRIES	609	758	-28	1651	12	82.1	82	1883	9	9.6	22.5
6	CHAMPION SPARK PLUG	631	707	52	738	3	22.1	36	555	-17	7.8	6.6
7	PEP BOYS-MANNY, MOE & JACK	635	704	-8	630	17	36.0	5	557	27	9.3	13.5
8	CUMMINS ENGINE	679	641	3	3310	20	-63.4	NM	2064	2	-15.9	-11.4
9	FEDERAL-MOGUL	709	604	18	1177	9	43.4	6	811	1	11.7	12.4
10	SPX	825	487	7	878	13	44.9	72	696	24	9.8	14.4
11	ARVIN INDUSTRIES	878	424	3	1313	0	16.5	-65	1058	31	4.9	3.6
12	DANAHER	961	357	35	716	16	40.0	96	596	-21	13.5	27.4
10 TIRE & RUBBER												
GROUP COMPOSITE			4191	-16	12049	10	460.9	-24	9366	3	11.7	19.1
1	GOODYEAR TIRE & RUBBER	212	2692	-28	10810	9	350.1	-32	8618	3	10.2	17.3
2	BANDAG	504	990	-1	491	16	69.8	12	306	5	NA	49.5
3	COOPER TIRE & RUBBER	803	509	35	748	12	41.1	34	443	7	13.5	16.8
3 BANKS												
INDUSTRY COMPOSITE			127096	22	216855	13	17721.4	NM	2023366	6	32.5	16.6
3A BANKS - EAST												
GROUP COMPOSITE			56235	24	116444	15	9480.4	NM	1012525	5	47.9	18.5
1	CITICORP	47	9174	43	32024	15	1698.0	NM	207666	2	18.8	20.9
2	J. P. MORGAN	62	6958	14	7839	15	1001.8	1103	83923	11	24.0	17.9
3	PNC FINANCIAL	150	3811	11	3827	21	442.7	73	40811	12	31.0	17.5
4	BANKERS TRUST NEW YORK	169	3325	27	5851	4	647.7	NM	57942	3	28.2	18.5
5	CHASE MANHATTAN	183	3063	40	12365	15	1058.9	NM	97455	-2	33.9	23.9
6	FLEET/NORSTAR FINANCIAL GROUP	204	2793	18	3051	13	335.8	68	29052	11	NA	18.9
7	CHEMICAL BANKING	286	1958	44	7644	13	753.6	NM	67349	-14	25.5	22.6
8	SHAWMUT NATIONAL	299	1858	7	2811	19	242.6	53	28414	7	23.6	15.0
9	MANUFACTURERS HANOVER	312	1809	34	8545	10	752.0	NM	66710	-9	NA	26.6
10	BANK OF BOSTON	336	1728	5	5296	24	322.3	1539	36061	6	NA	16.4
11	CORESTATES FINANCIAL	347	1653	8	1630	13	179.5	11	16431	9	18.9	16.2
12	BANK OF NEW ENGLAND	351	1644	16	3197	19	281.7	104	32200	9	27.7	17.3
13	BANK OF NEW YORK	376	1476	51	2620	22	213.0	106	47388	105	17.2	16.5
14	MIDLANTIC	377	1472	-5	1846	20	222.9	38	18945	11	22.2	17.4
15	MNC FINANCIAL	398	1348	6	1983	24	170.2	14	18015	8	24.5	15.3
16	REPUBLIC NEW YORK	399	1341	2	2105	26	169.7	413	24519	10	11.8	13.4
17	STATE STREET BOSTON	516	968	5	897	18	92.3	11	8372	20	27.8	18.3
18	KEYCORP	529	931	22	1394	19	119.9	65	14646	17	15.9	14.2
19	UNITED JERSEY BANKS	530	929	1	1032	16	116.1	13	10888	7	NA	15.0
20	MILLON BANK	586	801	-2	3269	-2	-65.0	NM	31153	2	NM	-11.9
21	PRUDENTIAL BANCORP	610	756	9	950	12	86.1	8	9523	13	18.9	13.3
22	FIRST MARYLAND BANCORP	638	702	73	661	11	52.4	16	6274	11	18.7	13.3
23	WAYBANKS	660	673	5	921	19	88.5	28	9496	12	19.5	16.2
24	INTEGRA FINANCIAL	700	614	90	657	9	66.4	5	6930	5	25.1	25.9
25	WILMINGTON TRUST	733	581	12	313	10	51.8	20	2982	3	30.0	22.7
26	MERCANTILE BANKSHARES	789	523	14	362	15	53.4	16	3530	12	NA	15.5
27	NORTHEAST BANCORP	805	506	42	323	15	34.6	15	3242	10	18.2	13.7
28	FIRST PENNSYLVANIA	834	481	25	623	16	58.2	NM	6407	10	NA	20.7
29	U. S. TRUST	892	411	-13	362	7	30.6	-11	3061	20	18.2	15.7



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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
30	SUMMIT BANCORPORATION	894	411	11	329	17	38.7	11	3526	15	NA	NA
31	DAUPHIN DEPOSIT	905	395	15	298	9	40.7	11	3336	10	18.2	15.5
32	FIRST EMPIRE STATE	916	391	3	537	15	44.5	10	5908	14	14.6	11.7
33	NATIONAL COMMUNITY BANK	929	379	NA	321	29	42.0	22	3614	15	NA	NA
34	RIGGS NATIONAL	940	374	24	562	17	37.0	3554	6756	10	13.9	10.9

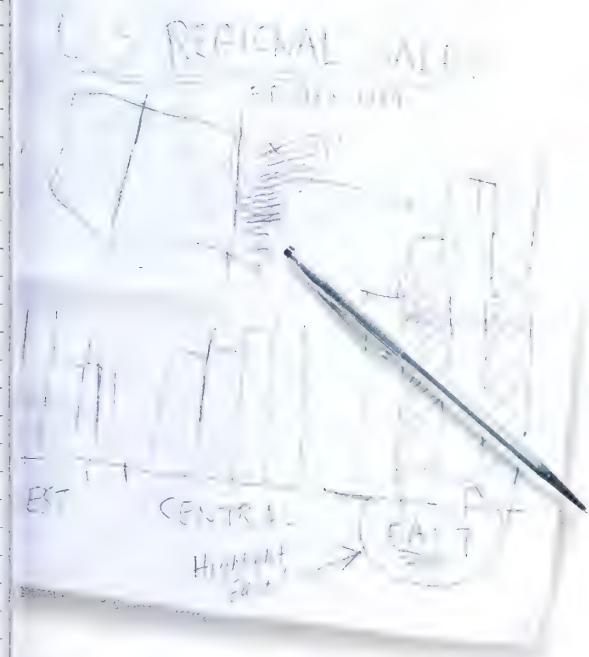
3B BANKS - MIDWEST

GROUP COMPOSITE		26096		21	35141		10	3036.4		4846	356200		4	28.2		14.7
1	BANC ONE	173	3263	22	2735	15	340.2	47	25274	9	NA	17.2				
2	FIRST CHICAGO	238	2415	75	4816	14	513.1	NM	44432	1	NA	26.4				
3	NATIONAL CITY	287	1943	58	2227	12	233.2	80	21623	8	22.3	17.6				
4	NBD BANCORP	301	1848	9	2181	11	227.2	40	24176	4	19.8	15.1				
5	NORWEST	356	1594	24	2475	8	211.2	NM	21750	5	NA	19.0				
6	FIRST BANK SYSTEM	435	1208	-5	1954	-21	-310.0	NM	24248	-10	NM	-36.0				
7	BOATMEN'S BANCSHARES	470	1106	59	1378	2	69.8	-28	14676	-3	14.8	6.7				
8	FIFTH THIRD BANCORP	473	1080	43	506	21	84.2	33	5246	20	20.2	16.5				
9	AMERITRUST	560	858	21	1052	13	103.5	NM	10738	4	20.8	14.6				
10	CONTINENTAL BANK	575	829	106	3060	10	315.8	NM	30578	-6	NA	29.1				
11	SOCIETY	616	743	-2	972	9	100.1	10	10010	10	18.1	14.7				
12	COMERICA	619	734	6	1043	11	112.0	57	11145	10	16.9	18.3				
13	NORTHERN TRUST	622	729	14	1003	20	109.3	NM	9904	6	NA	27.4				
14	HUNTINGTON BANCSHARES	632	707	-3	881	12	87.6	83	9506	8	21.4	15.9				
15	MANUFACTURERS NATIONAL	654	678	6	924	21	96.3	1352	9311	3	24.6	16.8				
16	MICHIGAN NATIONAL	662	670	-6	1040	15	93.2	26	11306	33	23.1	16.9				
17	MARSHALL & ILSLEY	677	643	23	677	7	76.2	30	6775	8	17.9	16.0				
18	FIRSTAR	712	600	22	850	19	109.9	NM	7842	6	NA	20.6				
19	OLD KENT FINANCIAL	752	563	12	726	22	77.1	9	7854	11	19.7	16.3				
20	FIRST NATIONAL CINCINNATI	762	553	-7	531	15	55.4	22	5657	11	16.2	12.9				
21	INDIANA NATIONAL	807	505	5	545	15	55.8	106	5927	9	23.2	14.2				
22	FIRST OF AMERICA BANK	837	478	-8	885	15	88.8	14	9769	13	NA	14.7				
23	MERCANTILE BANCORPORATION	886	414	17	673	0	28.7	NM	6459	-1	NA	6.7				
24	FIRST ILLINOIS	888	413	NA	182	16	29.2	28	1635	11	NA	NA				
25	COMMERCE BANCSHARES	890	412	20	479	6	49.0	22	5444	3	NA	12.9				
26	MERCHANTS NATIONAL	922	385	8	452	17	44.1	202	5256	25	24.9	13.5				
27	TRUSTCORP	944	371	8	563	10	1.3	-97	5947	10	NA	-0.7				
28	UNITED MISSOURI BANCSHARES	967	355	1	334	16	34.5	7	3714	5	NA	11.4				

3C BANKS - SOUTH & SOUTHEAST

GROUP COMPOSITE		25693		11	29855	13	2883.4	26	304881	7	24.4	14.9
1	MCNB	181	3109	79	2830	15	252.5	51	29848	3	26.4	13.3
2	SUNTRUST BANKS	213	2678	−9	2889	13	308.7	9	29177	8	18.9	16.4
3	FIRST WACHOVIA	245	2337	17	2020	13	244.3	38	21815	13	23.4	15.7
4	FIRST UNION	252	2260	−1	2899	10	296.9	5	28978	5	NA	15.8
5	SOVRAN FINANCIAL	283	1975	3	2230	10	243.1	12	22484	7	20.7	17.0
6	BARNETT BANKS	285	1965	−2	2546	14	226.4	22	25748	10	NA	15.5
7	CITIZENS & SOUTHERN	349	1647	9	2090	13	206.3	31	21098	3	23.6	16.7
8	SIGNET BANKING	569	836	10	1286	23	152.5	550	11002	3	31.1	22.4
9	SOUTHEAST BANKING	615	744	2	1405	11	75.3	222	15623	11	12.0	10.1
10	DOMINION BANCSHARES	626	719	19	898	13	83.0	7	9204	5	18.7	14.4
11	CRESTAR FINANCIAL	640	700	−1	1016	8	86.7	53	10408	7	22.7	13.7
12	FLORIDA NATIONAL BANKS	685	631	64	749	9	34.9	7	7828	4	15.7	7.3

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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
13 AHSOUTH BANCORPORATION	726	585	-1	797	22	79.8	31	8313	8	NA	15.0
14 SOUTHTRUST	744	567	8	626	21	67.6	12	6645	10	18.2	15.2
15 FIRST VIRGINIA BANKS	757	557	5	482	8	60.9	8	4796	8	NA	15.2
16 FIRST ALABAMA BANKSHARES	791	520	5	474	14	58.2	4	5174	18	NA	12.8
17 FIRST AMERICAN	814	495	-5	699	13	30.4	-41	7204	3	17.0	6.5
18 HIBERNIA	827	487	12	546	18	53.0	14	5834	20	22.3	15.9
19 SOUTH CAROLINA NATIONAL	846	464	3	552	13	54.5	3	5323	15	24.6	14.2
20 FIRST FLORIDA BANKS	855	456	2	479	10	48.9	1	5132	4	18.4	13.0
21 CENTRAL FIDELITY BANKS	872	432	-1	446	10	49.5	5	4731	10	19.7	14.8
22 FIRST TENNESSEE NATIONAL	899	405	2	611	7	52.3	54	5972	2	NA	14.4
23 BANCO POPULAR DE PUERTO RICO	918	390	38	552	21	47.4	24	5707	6	NA	13.9
24 BANK SOUTH	938	375	5	482	15	43.4	48	4881	11	25.4	15.6
25 CB&T BANKSHARES	953	361	-7	250	10	26.8	14	1957	11	NA	NA

3D BANKS - WEST & SOUTHWEST

GROUP COMPOSITE		19074		42	35416		9	2321.3	NM	349798		10	13.4	15.0
1	SECURITY PACIFIC	118	4482	34	8483	11	638.9	3969	77870	7	15.7	17.5		
2	BANKAMERICA	135	4082	144	10181	0	547.0	NM	94647	2	12.8	14.2		
3	WELLS FARGO	157	3540	25	4860	6	512.5	909	46617	6	NA	22.4		
4	FIRST INTERSTATE BANCORP	266	2119	1	5932	17	102.4	NM	58194	14	-2.3	4.8		
5	U. S. BANCORP	468	1110	10	1381	20	123.9	24	14383	8	15.6	13.1		
6	UNION BANK	601	769	NA	787	34	60.2	50	15010	179	NA	NA		
7	CITY NATIONAL	701	614	20	371	20	49.3	21	4296	23	NA	22.1		
8	BANCORP HAWAII	704	611	29	630	28	74.9	41	6635	14	19.5	19.0		
9	VALLEY NATIONAL	787	526	-10	1147	7	62.3	NM	11766	4	10.6	10.1		
10	FIRST HAWAIIAN	847	464	45	385	15	43.3	22	4239	8	16.3	17.9		
11	FIRST CITY BANCORP. OF TEXAS	904	399	NA	865	NA	66.1	NA	12195	NA	1.8	11.1		
12	PUGET SOUND BANCORP	958	359	17	395	11	40.4	118	3947	11	11.7	15.0		

4

CHEMICALS

	INDUSTRY COMPOSITE		102756	10	124927	15	11296.5	42	120447	9	19.3	21.5
1	DU PONT	9	24303	15	32917	8	2190.0	23	30719	9	13.0	14.5
2	DOW CHEMICAL	17	17232	2	16682	25	2410.0	94	16239	13	25.0	33.2
3	MONSANTO	73	6376	3	8293	9	591.0	36	8439	0	13.6	15.6
4	AMERICAN CYANAMID	106	4911	6	4592	10	305.6	16	4593	11	14.9	15.4
5	UNION CARBIDE	132	4162	26	8324	20	720.0	210	8441	7	20.5	44.4
6	ETHYL	195	2940	8	2011	17	231.0	20	2195	11	15.7	21.1
7	ARCO CHEMICAL	199	2844	-12	2700	38	494.0	92	2548	1	33.4	37.5
8	W. R. GRACE	225	2589	10	5786	28	192.1	35	5171	23	8.6	13.2
9	HIMONT	231	2541	-4	1711	47	372.9	64	1905	26	26.9	27.5
10	AIR PRODUCTS & CHEMICALS	248	2326	-11	2487	14	219.5	22	3136	13	13.3	16.5
11	FREEPORT-McMORAN	255	2247	17	1945	28	310.1	25	3730	19	NA	NA
12	ROHM & HAAS	258	2204	-3	2535	15	230.1	18	2242	15	16.8	19.1
13	HERCULES	265	2132	-16	2802	4	120.4	-85	3325	-5	6.3	5.9
14	MORTON THIOKOL	267	2113	1	2461	14	159.7	5	2028	13	13.6	14.1
15	IMRIZOL	385	1432	-13	1126	10	131.2	61	971	3	NA	21.3
16	GAF	387	1418	-6	961	15	90.8	-9	1416	-11	11.5	15.2
17	HALCO CHEMICAL	390	1406	-9	994	18	106.0	32	839	7	19.6	22.2
18	B. F. GOODRICH	405	1317	1	2417	19	209.9	151	2073	7	NA	19.9
19	IMC FERTILIZER GROUP	434	1219	NA	1185	21	124.4	66	1502	6	13.4	16.2
20	QUANTUM CHEMICAL	437	1203	-55	2922	29	360.1	174	2907	12	NM	-88.5

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
21	CABOT	443	1174	18	1770	21	67.7	85	1641	2	8.8	11.9
22	GREAT LAKES CHEMICAL	455	1142	5	616	23	103.3	86	636	20	NA	22.6
23	OLIN	482	1066	-12	2308	20	98.0	26	1940	15	11.8	14.5
24	GEORGIA GULF	483	1061	26	1061	50	193.6	111	457	48	66.9	75.7
25	STERLING CHEMICALS	517	968	NA	727	48	227.4	186	318	10	NA	157.9
26	ENGELHARD	526	933	6	2351	-5	63.7	-9	1413	16	7.5	8.6
27	PENNWALT	532	926	53	1024	21	48.3	47	950	-5	NA	NA
28	ARISTECH CHEMICAL	546	888	8	1065	16	164.5	136	676	23	32.5	41.3
29	INTL. MINERALS & CHEMICAL	557	863	-26	1044	-42	78.7	-13	2072	9	6.4	6.9
30	WITCO	573	832	6	1586	11	71.6	13	1115	6	10.2	12.8
31	VISTA CHEMICAL	593	793	-7	794	21	123.8	492	493	-2	42.0	101.6
32	DEXTER	605	764	21	837	9	39.9	-8	626	2	NA	13.3
33	BETZ LABORATORIES	612	749	-6	448	16	48.4	19	319	11	21.7	21.6
34	LOCTITE	652	680	5	439	15	47.6	30	357	3	20.7	21.3
35	WELLMAN	711	601	49	315	21	38.0	71	243	19	22.6	27.2
36	FERRO	730	582	44	1009	16	46.6	47	588	4	15.6	15.8
37	REXENE	750	564	NA	719	39	129.5	66	511	NA	37.2	55.0
38	M. A. HANNA	821	490	28	1019	122	83.2	129	964	-4	17.3	20.8
39	FIRST MISSISSIPPI	915	392	50	332	2	25.3	-15	428	54	12.0	13.0
40	A. SCHULMAN	937	375	3	616	23	28.6	33	281	11	17.2	18.1

5

CONGLOMERATES

INDUSTRY COMPOSITE		120973		10	176473		8	10018.5		23	265918		8	15.5		14.7
1	GENERAL ELECTRIC	3	40482	2	49414	4	3386.0	14	110865	16	20.0	18.3				
2	MINNESOTA MINING & MFG.	20	15423	6	10581	12	1154.0	26	8775	8	20.5	21.2				
3	USX	50	8224	-2	16877	13	756.0	267	19474	-4	10.2	14.0				
4	ITT	57	7101	6	9075	10	1084.7	48	13722	1	13.9	13.9				
5	TENNECO	59	7039	9	13234	11	-1.0	NM	17376	-22	NA	-0.7				
6	ROCKWELL INTERNATIONAL	84	5714	7	12134	2	779.0	15	8406	-2	18.9	20.7				
7	GULF & WESTERN	89	5484	12	3123	5	389.2	11	5439	10	NA	17.1				
8	ALLIED-SIGNAL	108	4901	1	11909	7	463.0	-10	10005	-2	13.1	14.2				
9	TELEDYNE	144	3937	-1	4523	8	391.8	4	5125	4	16.2	18.3				
10	WHITMAN	171	3297	-8	3583	17	176.7	-1	4039	7	9.7	11.3				
11	TRW	218	2656	-16	6982	2	261.0	7	4442	1	14.0	16.6				
12	TEXTRON	250	2315	9	7286	2	272.1	4	12554	10	9.2	11.7				
13	HOUSEHOLD INTERNATIONAL	260	2186	14	1278	19	183.7	12	21032	26	9.6	15.5				
14	PENN CENTRAL	345	1669	4	1547	23	94.1	210	2400	-2	NA	5.3				
15	VALHI	363	1552	47	2252	63	80.6	85	2291	-5	15.1	26.0				
16	GREYHOUND	456	1141	1	3305	32	93.3	13	3374	13	8.1	9.4				
17	PREMARK INTERNATIONAL	464	1118	7	2397	9	121.2	70	1655	4	14.4	17.0				
18	PALL	472	1086	-3	456	12	58.7	20	605	12	NA	17.4				
19	OGDEN	476	1076	-11	1088	21	57.8	21	978	18	NA	13.3				
20	ITEL	489	1038	86	1693	33	24.8	59	3571	103	4.4	2.0				
21	ALCO STANDARD	493	1027	-13	3874	5	101.6	19	1531	17	11.4	13.4				
22	FIGGIE INTERNATIONAL	676	646	29	1200	14	61.9	25	783	25	13.8	16.9				
23	FUQUA INDUSTRIES	695	622	-5	934	38	76.7	78	1140	55	NA	18.5				
24	PITTSWAY	840	474	16	771	19	37.3	15	595	18	11.4	11.4				
25	WICKES	920	387	-23	3985	6	-46.1	NM	3918	-3	NM	-4.4				
26	NATIONAL INTERGROUP	932	377	-11	2975	-22	-39.7	NM	1824	-9	NM	-6.6				

6

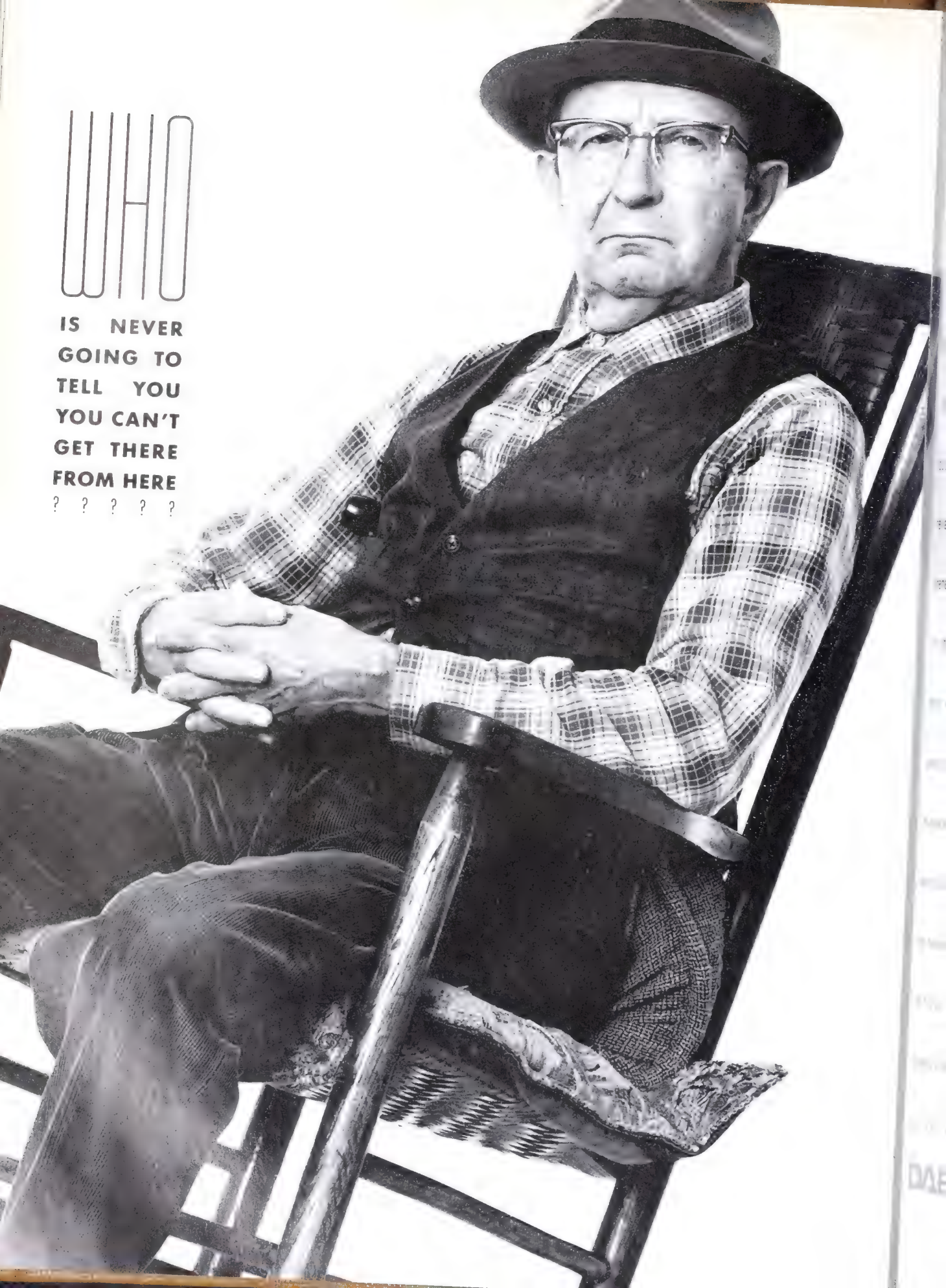
CONSUMER PRODUCTS

INDUSTRY COMPOSITE		154742	19	171092	13	11210.2	23	132482	7	23.7	22.6	
6A APPAREL												
INDUSTRY COMPOSITE		9907	9	12778	13	841.3	10	8807	9	17.4	19.4	
1	VF	253	2252	2	2516	-2	173.7	-3	1760	-10	14.8	16.3
2	LIZ CLAIBORNE	365	1532	1	1184	12	110.3	-4	573	31	24.7	25.5
3	REEBOK INTERNATIONAL	383	1440	-21	1786	29	137.0	-17	1063	3	18.1	19.9
4	NIKE	445	1172	29	1519	59	139.8	135	721	39	28.1	28.8
5	RUSSELL	589	797	38	531	11	53.8	16	561	26	13.6	17.4

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RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
6	BROWN GROUP	740	571	-9	1707	2	30.1	-36	776	11	8.0	8.5
7	STRIDE RITE	818	492	56	379	14	34.7	44	243	28	25.4	25.9
8	HARTMARX	822	490	1	1174	9	38.0	-8	734	11	9.6	10.6
9	FRUIT OF THE LOOM	839	477	22	1005	15	73.0	93	1810	12	12.7	32.6
10	OSHKOSH B'GOSH	982	346	-17	253	12	18.8	-21	147	33	18.7	19.2
11	KELLWOOD	994	336	1	724	8	32.0	10	417	10	15.3	17.9

6B APPLIANCES & HOME FURNISHINGS

GROUP COMPOSITE		8780	10	14433	11	675.9	3	9395	13	12.3	16.8	
1	WHIRLPOOL	305	1836	-3	4421	5	161.3	-14	3410	9	12.2	12.2
2	ARMSTRONG WORLD INDUSTRIES	352	1624	-8	2680	13	162.7	8	1678	15	14.8	NA
3	MAYTAG	367	1521	-17	1890	4	135.5	-8	976	11	NA	28.9
4	CIRCUIT CITY STORES	514	971	55	1619	30	63.0	43	686	11	18.9	25.9
5	OHIO MATTRESS	578	819	138	662	11	33.2	42	542	3	9.6	12.7
6	LEGGETT & PLATT	873	430	-8	810	19	37.7	-2	478	20	NA	15.7
7	MONASCO	877	425	-1	804	0	-0.6	NM	639	66	-0.6	-10.7
8	INTERAM	898	408	112	613	19	31.5	5559	373	14	15.7	19.5
9	PIER 1 IMPORTS	919	390	51	388	23	19.9	23	286	18	12.5	17.8
10	KIMBALL INTERNATIONAL	966	355	-19	546	8	31.6	-9	328	2	13.1	13.4

6C BEVERAGES

GROUP COMPOSITE		45126	19	39091	13	2963.8	20	34778	5	24.1	22.8	
1	COCA-COLA	16	18006	22	8338	9	1044.7	14	7451	-13	27.6	33.1
2	PEPSICO	39	11232	23	13007	14	762.2	26	11135	23	NA	25.7
3	ANHEUSER-BUSCH	44	9600	3	8924	7	715.9	16	7110	9	17.0	23.1
4	COCA-COLA ENTERPRISES	264	2143	-3	3874	16	152.6	73	4669	-2	7.1	9.2
5	BROWN-FORMAN	325	1749	15	1048	-5	142.2	32	1008	-9	22.1	29.0
6	GENERAL CINEMA	337	1724	35	2378	75	99.3	2	1898	15	10.8	16.2
7	ADOLPH COORS	659	673	-11	1522	13	46.9	-3	1508	4	NA	4.4

6D PERSONAL CARE

GROUP COMPOSITE	35354	5	40794	14	2446.9	53	31730	6	20.3	19.6	
1 PROCTER & GAMBLE	21	15315	10	20368	14	1128.0	135	15793	4	14.2	16.3
2 GILLETTE	166	3381	-27	3581	13	268.5	17	2818	5	NA	NM
3 COLGATE-PALMOLIVE	177	3201	5	4734	8	152.7	NM	3344	4	13.0	15.1
4 INTL. FLAVORS & FRAGRANCES	292	1915	0	840	13	128.7	20	882	1	20.0	19.3
5 AVON PRODUCTS	328	1742	7	3063	18	121.1	-47	2460	-2	16.1	46.6
6 CLOROX	335	1729	-3	1354	14	138.5	15	1161	19	18.2	18.3
7 BAUSCH & LOMB	391	1404	4	978	16	97.9	15	1211	24	15.0	16.5
8 TAMBRANDS	407	1316	5	563	9	85.3	11	465	14	NA	24.7
9 HUXELL	596	789	-17	522	7	51.0	17	330	12	21.0	20.7
10 ECOLAB	600	773	7	1212	19	44.1	6	943	-2	9.2	10.6
11 SHAKLEE	692	625	132	627	10	27.2	16	418	11	10.1	10.7
12 NEUTROGENA	754	560	-22	184	23	24.1	34	93	31	40.8	40.8
13 BLOCK DRUG	771	546	16	395	16	42.4	16	396	15	NA	14.2
14 STANHOME	797	514	50	480	11	40.6	24	276	13	30.9	28.3
15 ALBERTO-CULVER	861	445	-1	634	18	25.6	18	321	17	14.1	18.3
16 NCH	921	386	-4	545	13	34.9	30	345	9	17.1	18.3
17 MINNETONKA	931	377	67	214	40	15.8	56	149	66	NA	26.3
18 CHEMED	995	336	2	501	28	20.6	1	323	22	13.4	17.7

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	6E TOBACCO											
	GROUP COMPOSITE		55577	35	63996	12	4282.4	18	47774	8	46.1	26.9
	1 PHILIP MORRIS	5	26992	21	31742	13	2124.0	15	20295	8	NA	29.0
	2 RJR NABISCO	12	19300	49	16956	8	1393.0	29	17838	6	16.8	26.0
	3 AMERICAN BRANDS	77	6017	19	11980	19	540.8	8	7904	13	13.7	22.0
	4 UST	220	2640	58	619	7	162.2	24	598	9	35.4	36.8
	5 UNIVERSAL	687	629	22	2700	18	62.5	1	1140	13	16.1	16.3
7	CONTAINERS & PACKAGING											
	INDUSTRY COMPOSITE		11674	18	15650	13	1332.8	50	12335	9	25.7	23.4
	7A GLASS, METAL & PLASTIC											
	GROUP COMPOSITE		1903	8	2907	5	126.1	-15	1950	6	15.4	12.1
	1 CROWN CORK & SEAL	416	1277	29	1834	7	93.4	6	1073	1	15.4	15.1
	2 BALL	691	626	-23	1073	2	32.7	-46	876	12	NA	7.7
	7B PAPER											
	GROUP COMPOSITE		9772	20	12742	15	1206.6	64	10386	10	27.0	26.7
	1 STONE CONTAINER	316	1799	-3	3742	16	341.8	112	2395	5	21.8	35.6
	2 SONOCO PRODUCTS	361	1557	37	1600	22	96.3	57	977	11	15.8	22.2
	3 TEMPLE-INLAND	384	1434	8	1774	11	199.2	41	1982	10	13.8	18.9
	4 JEFFERSON SMURFIT	449	1161	4	1255	14	144.5	57	764	14	36.3	49.7
	5 FEDERAL PAPER BOARD	485	1046	32	1117	9	143.3	94	1335	13	17.0	NA
	6 POTLATCH	547	885	-1	1084	9	112.4	28	1418	9	11.8	NA
	7 LONGVIEW FIBRE	623	728	30	690	20	99.2	47	652	19	21.6	28.1
	8 BEMIS	678	642	28	1069	15	39.6	24	595	9	13.5	17.1
	9 GREIF BROS.	790	520	25	412	16	30.3	47	267	8	13.1	13.1
8	DISCOUNT & FASHION RETAILING											
	INDUSTRY COMPOSITE		101012	18	203997	12	6899.7	7	159786	8	21.3	15.8
	1 WAL-MART STORES	15	18590	11	20649	29	837.2	33	7032	18	24.3	31.0
	2 SEARS, ROEBUCK	18	16341	13	50251	9	1032.3	-40	77533	2	15.9	7.4
	3 K MART	52	7703	6	27655	7	802.9	16	12126	9	13.3	17.3
	4 J. C. PENNEY	70	6473	-4	15296	-3	807.0	33	12254	4	14.8	25.5
	5 MAY DEPARTMENT STORES	86	5595	-4	11742	15	503.0	14	8144	32	NA	17.8
	6 LIMITED	94	5376	32	4071	15	245.1	4	2146	11	17.9	29.7
	7 TOYS 'R' US	110	4869	7	4000	28	268.0	31	2903	24	19.5	21.2
	8 MELVILLE	120	4469	23	6780	14	354.5	24	2736	23	NA	23.2
	9 DAYTON HUDSON	153	3724	15	12204	14	287.9	26	6823	9	10.0	15.2
	10 F. W. WOOLWORTH	179	3164	1	8088	13	288.0	15	3919	18	16.2	16.9
	11 NORDSTROM	222	2607	26	2328	21	123.3	33	1512	22	16.1	20.7
	12 PRICE	315	1803	-6	4338	24	102.8	26	1226	28	14.8	19.7
	13 HOME DEPOT	330	1739	41	2000	38	76.8	42	699	32	17.0	20.0
	14 DILLARD DEPARTMENT STORES	355	1595	29	2558	16	113.8	25	1717	15	14.0	16.6
	15 MERCANTILE STORES	357	1589	-1	2266	5	144.5	12	1496	7	13.8	15.5
	16 GAP	386	1425	70	1252	18	74.2	7	481	11	27.8	29.1
	17 ZAYRE	389	1410	16	1921	2	55.1	-55	1868	-27	8.5	10.3
	18 TJX	426	1259	29	1921	17	85.8	29	760	23	23.5	28.7
	19 PETRIE STORES	545	889	-9	1218	-2	35.1	-26	863	-23	5.8	5.8
	20 LOWE'S	553	868	10	2517	3	69.2	24	1109	-1	11.1	11.9
	21 U. S. SHOE	561	856	-23	2274	5	5.3	-87	1197	11	2.9	1.1
	22 CNARMING SHOPPES	572	832	26	725	14	38.2	-10	377	25	NA	17.9
	23K LANDS' END	670	656	56	456	36	32.3	46	149	49	38.2	40.4
	24 HECHINGER	684	632	-8	1019	41	48.8	22	653	14	11.0	13.8
	25 SERVICE MERCHANDISE	703	612	149	3093	14	76.5	207	1711	10	13.4	25.4
	26 SPIEGEL	721	591	21	1402	32	57.0	39	1207	42	8.0	18.0
	27 AMES DEPARTMENT STORES	732	581	-3	2159	10	41.3	105	2659	192	3.5	9.2
	28 PIC 'N' SAVE	743	567	-8	402	11	46.9	-1	226	5	NA	24.2
	29 NEIMAN-MARCUS GROUP	745	567	9	1331	12	13.0	NM	951	23	3.7	NM



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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	30 HOME SHOPPING NETWORK	786	526	-1	745	12	21.1	-9	561	3	8.9	13.0
	31 COSTCO WHOLESALE	850	459	28	2149	39	14.5	221	552	30	9.1	13.2
	32 TIFFANY	881	422	81	290	26	24.9	48	163	28	NA	29.8
	33 NEW PROCESS	900	403	76	418	15	34.1	51	157	16	NA	33.3
	34 EDISON BROTHERS STORES	917	391	41	919	-1	36.3	NM	513	22	NM	19.0
	35 FRED MEYER	927	381	28	2074	12	36.7	14	687	10	10.8	15.1
	36 ROSS STORES	957	359	115	634	10	26.3	127	251	6	21.4	19.7
	37 CONSOLIDATED STORES	975	351	63	627	6	22.6	74	332	7	12.3	16.5
	38 DRESS BARN	991	340	25	228	21	17.6	22	96	33	28.7	28.7
9	ELECTRICAL & ELECTRONICS											
	INDUSTRY COMPOSITE	68566	-9	105078	13	5666.3	11	96241	11	15.6	12.8	
	9A ELECTRICAL PRODUCTS											
	GROUP COMPOSITE	22477	-3	28889	11	2004.2	4	31057	10	40.9	17.6	
	1 WESTINGHOUSE ELECTRIC	51	7720	4	12500	10	822.8	-9	16937	11	18.4	21.7
	2 EMERSON ELECTRIC	65	6682	-14	6793	8	540.7	12	5327	5	17.2	18.7
	3 COOPER INDUSTRIES	203	2794	-8	4258	19	224.4	29	4384	15	9.8	13.2
	4 SQUARE D	395	1368	-10	1657	12	118.9	8	1336	4	NA	18.8
	5 RAYCHEM	428	1246	-34	1103	9	102.8	15	1183	14	13.3	13.8
	6 NATIONAL SERVICE INDUSTRIES	451	1158	-2	1444	7	88.2	12	832	8	15.3	15.4
	7 HUBBELL	524	938	4	614	6	71.3	14	532	14	18.5	18.7
	8 AMETEK	739	572	-23	521	21	35.1	-4	526	-3	NA	13.5
	9B ELECTRONICS											
	GROUP COMPOSITE	19346	-9	39884	10	2259.2	23	34675	11	13.1	13.3	
	1 MOTOROLA	98	5220	-17	8250	23	445.0	44	6710	22	13.9	13.6
	2 RAYTHEON	119	4480	-12	8192	7	489.6	10	4740	14	25.3	24.3
	3 GM HUGHES ELECTRONICS	NR	3365	-27	11001	6	783.4	17	11808	6	10.6	10.4
	4 LITTON INDUSTRIES	293	1904	-13	4943	4	172.8	14	4950	2	9.9	14.6
	5 HARRIS	474	1079	-10	2105	1	69.6	-22	2041	16	6.6	7.0
	6 GENERAL INSTRUMENT	508	984	-14	1268	15	84.3	57	1340	26	10.9	13.8
	7 LORAL	540	903	-8	1493	20	85.2	23	1447	2	11.5	17.3
	8 E-SYSTEMS	555	865	-7	1439	17	74.6	23	758	16	13.9	15.8
	9 VARIAN ASSOCIATES	772	545	-12	1193	16	54.7	NM	882	9	12.5	12.6
	9C INSTRUMENTS											
	GROUP COMPOSITE	9646	-10	18422	15	-77.1	NM	14310	3	-8.0	-1.2	
	1 HONEYWELL	210	2712	-6	7148	7	-434.9	NM	5089	-6	NM	-25.1
	2 JOHNSON CONTROLS	421	1265	0	3227	18	104.6	19	2038	15	10.1	11.9
	3 GENERAL SIGNAL	522	943	-34	1760	10	25.2	-64	1397	2	2.9	2.7
	4 PERKIN-ELMER	525	935	-23	1201	22	63.7	NM	1284	-4	NA	9.2
	5 MILLIPORE	565	851	-24	622	18	54.5	14	539	24	12.5	15.6
	6 SEQUA	683	633	-14	1617	80	56.1	5	1620	20	7.6	7.4
	7 TEKTRONIX	686	631	-22	1431	3	-8.6	NM	1010	4	-2.2	-1.7
	8 MEASUREX	800	510	-14	265	17	37.1	38	303	17	18.0	18.1
	9 APPLIED BIOSYSTEMS	869	432	23	149	38	18.6	55	154	10	14.6	14.6
	10 FOXBORO	926	382	3	540	7	9.8	NM	443	-4	NM	5.3
	11 TERADYNE	970	353	-8	462	22	-3.3	NM	434	9	NM	-1.1

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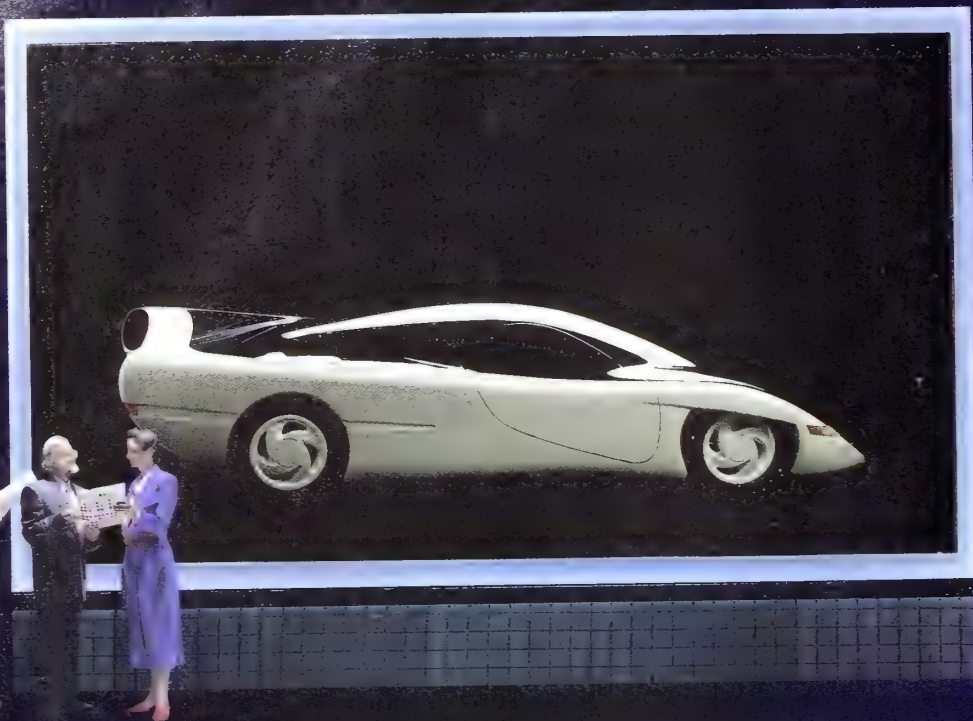
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(All Times Eastern)	1st 1/2 hr	2nd 1/2 hr	3rd 1/2 hr	4th 1/2 hr
Top Business News	6:30	7:00	7:30	8:00
Financial News	6:35	7:05	7:35	8:05
Small Business News	6:40	7:10	7:40	8:10
Special Business Features	6:50		7:50	
CEO Close-Ups		7:15		8:15
Internat'l Business Line		7:25		



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automotive excellence.



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*Net sales for the year ending March 31, 1988. US\$1 = ¥125.

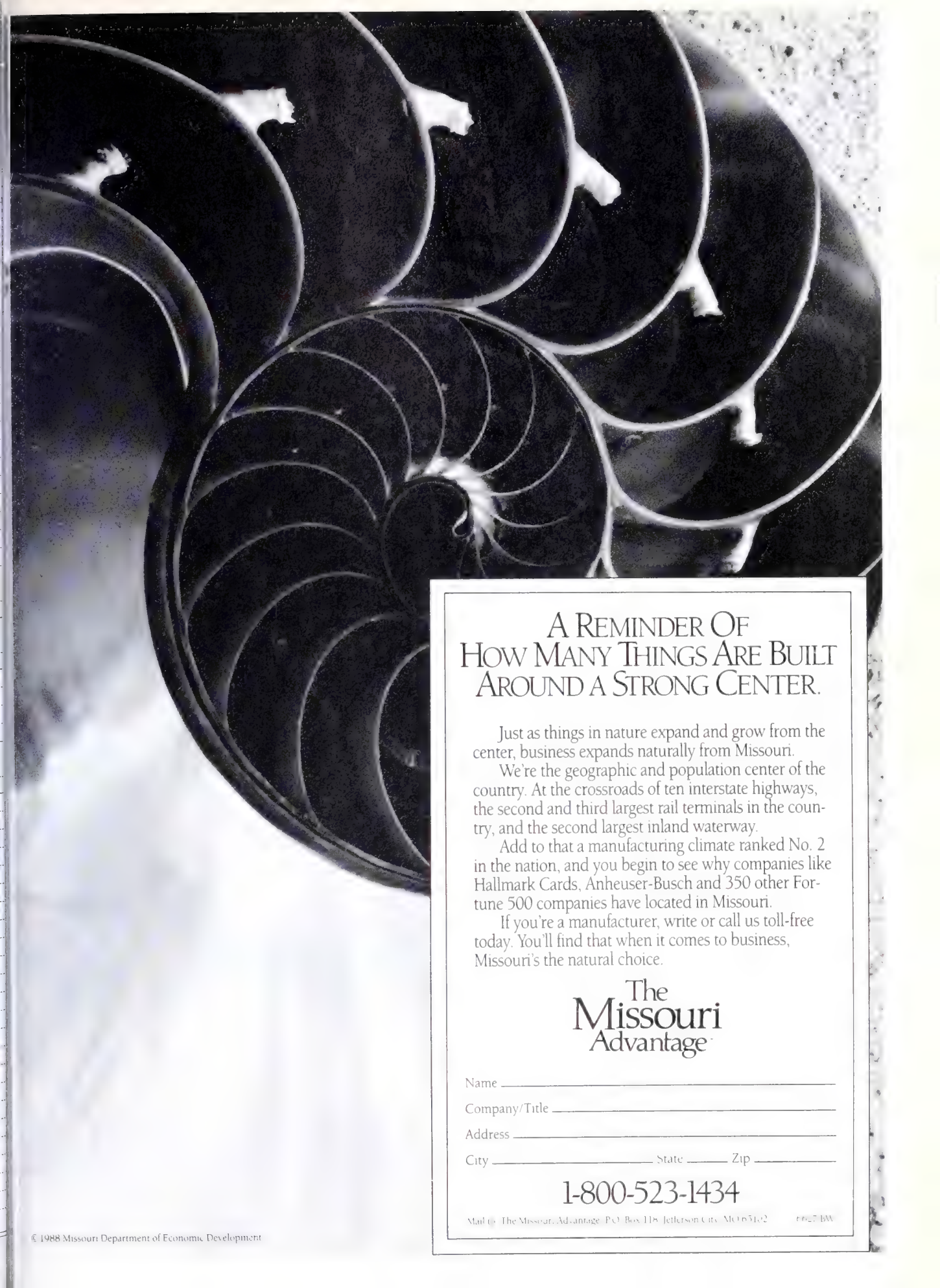


Hitachi, Ltd. Tokyo, Japan



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	
9D SEMICONDUCTORS													
GROUP COMPOSITE			17098	-14	17883	23	1480.0	66	16200	19	16.1	16.4	
1	AMP	115	4619	-20	2670	15	319.1	28	2376	14	20.5	21.0	
2	INTEL	123	4423	-17	2875	51	452.9	83	3550	42	19.8	21.8	
3	TEXAS INSTRUMENTS	186	3044	-28	6295	13	366.3	14	4428	12	13.6	19.5	
4	MOLEX	568	838	-25	550	26	56.3	12	528	13	NA	14.5	
5	NATIONAL SEMICONDUCTOR	587	801	-42	2516	29	-0.1	NM	1842	3	-0.0	-1.2	
6	THOMAS & BETTS	591	795	-13	515	18	58.7	21	493	20	NA	19.1	
7	ADVANCED MICRO DEVICES	669	657	-33	1126	13	19.3	NM	1081	2	NA	1.4	
8	MICROM TECHNOLOGY	680	639	25	368	218	121.7	NM	495	260	NA	31.0	
9	ANALOG DEVICES	815	494	-26	452	16	41.1	85	448	12	11.5	12.1	
10	LSI LOGIC	885	415	1	379	45	23.8	122	715	14	4.9	7.5	
11	CYPRESS SEMICONDUCTOR	943	373	-13	139	80	20.8	81	245	13	11.5	11.7	
10	FOOD												
	INDUSTRY COMPOSITE		91303	11	220590	14	5974.3	10	90739	20	15.9	20.7	
10A FOOD DISTRIBUTION													
GROUP COMPOSITE			5131	19	30903	19	333.7	27	7615	50	10.0	15.8	
1	SYS CO	290	1925	29	5561	39	96.8	44	1835	89	9.5	16.3	
2	SUPER VALU STORES	322	1768	10	10025	7	129.5	19	2383	14	13.0	17.3	
3	FLEMING	551	871	11	10467	21	65.4	32	2387	91	7.4	12.0	
4	WETTERAU	742	567	11	4850	23	42.0	12	1010	32	10.9	18.9	
10B FOOD PROCESSING													
GROUP COMPOSITE			68622	14	107093	12	4692.9	13	58547	13	17.8	19.8	
1	KELLOGG	56	7220	11	4349	15	480.4	21	3307	23	28.1	34.3	
2	H. J. HEINZ	74	6318	12	5639	11	424.7	12	4032	13	18.8	26.7	
3	RALSTON PURINA	90	5468	3	6046	7	372.6	11	4198	10	19.6	29.6	
4	SARA LEE	97	5233	13	11206	16	376.9	28	5663	12	NA	20.0	
5	GENERAL MILLS	114	4747	9	5429	10	280.7	13	2870	9	22.6	33.6	
6	BORDEN	130	4222	3	7244	11	311.9	17	4440	8	13.1	16.9	
7	ARCHER-DANIELS-MIDLAND	136	4071	15	7379	19	364.4	10	4817	5	11.6	12.9	
8	CPC INTERNATIONAL	137	4064	2	4700	-4	289.1	-19	3342	3	NA	25.4	
9	CAMPBELL SOUP	141	4010	2	5269	14	258.8	-2	4100	24	11.3	13.3	
10	QUAKER OATS	142	3980	4	5616	15	259.2	24	2942	6	18.2	20.1	
11	CONAGRA	237	2472	20	10341	12	171.7	16	3994	36	15.8	19.2	
12	HERSHEY FOODS	249	2322	-5	2168	16	144.5	16	1765	14	13.0	14.9	
13	CASTLE & COOKE	362	1555	45	2469	33	112.3	26	1836	46	12.0	14.5	
14	WM. WRIGLEY JR.	378	1469	-10	891	14	87.2	24	440	8	28.4	28.3	
15	GERBER PRODUCTS	413	1284	41	1017	11	76.7	54	662	-8	17.1	21.0	
16	PIONEER HI-BRED INTERNATIONAL	453	1154	4	863	5	61.0	24	979	2	NA	11.0	
17	HOLLY FARMS	462	1125	116	1798	17	69.0	59	784	11	12.4	15.6	
18	TYSON FOODS	513	974	13	2001	11	83.5	19	918	13	17.4	23.2	
19	GEO. A. HORMEL	571	834	-15	2289	-6	61.7	15	707	1	15.3	14.7	
20	DEAN FOODS	590	795	3	1612	8	54.2	20	563	13	17.6	16.6	
21	IBP	614	745	13	9066	18	62.3	-8	1324	3	10.2	13.1	
22	MCCORMICK	699	620	16	1184	10	35.6	46	770	2	11.8	12.1	
23	FLOWERS INDUSTRIES	731	582	-13	753	-3	41.0	25	438	7	14.9	20.0	
24	UNITED BRANDS	734	579	-21	3503	7	60.4	-2	1477	27	10.1	15.1	



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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
25	LANCE	741	570	-7	408	7	39.1	3	251	3	20.0	20.0
26	UNIVERSAL FOODS	767	549	54	722	1	29.9	14	447	11	12.2	16.2
27	TEJON RANCH	784	529	58	14	5	1.4	35	42	31	NA	4.8
28	J. M. SMUCKER	871	432	14	353	15	26.8	24	188	16	18.9	19.8
29	INTERNATIONAL MULTIFOODS	951	364	-21	1847	14	35.9	25	855	5	10.2	11.5
30	SAVANNAH FOODS & INDUSTRIES	997	334	79	917	4	20.1	43	395	10	13.1	16.0

10C FOOD RETAILING

	GROUP COMPOSITE	17551	1	82596	14	947.8	-6	24578	31	13.6	32.0	
1	FOOD LION	178	3179	-7	3815	29	112.5	31	944	28	21.9	28.0
2	ALBERTSON'S	224	2594	36	6773	15	162.5	30	1594	14	18.2	21.5
3	GREAT ATLANTIC & PACIFIC TEA	306	1830	32	9868	2	122.3	24	2337	4	11.9	13.0
4	WINN-DIXIE STORES	318	1787	4	9088	3	128.3	12	1631	6	17.2	17.2
5	AMERICAN STORES	343	1681	-4	18478	29	98.3	-36	7112	92	5.3	8.4
6	GIANT FOOD	394	1368	35	2904	8	89.4	41	961	12	16.5	22.4
7	WEIS MARKETS	402	1328	-6	1189	5	82.6	9	596	11	16.8	16.8
8	BRUNO'S	539	907	-7	2063	34	44.5	19	631	11	13.8	16.4
9	KROGER	580	815	-67	19053	8	34.5	-81	4706	10	-6.2	-0.6
10	CIRCLE K	657	673	24	3231	25	52.5	2	1800	42	7.1	15.7
11	VONS	759	557	179	3917	NA	-23.9	NA	1628	56	NM	-12.3
12	HANNAFORD BROTHERS	820	491	32	1262	22	28.9	20	387	27	13.3	18.0
13	BIG BEAR	987	340	62	955	9	15.3	6	250	10	13.8	13.8

11 FUEL

INDUSTRY COMPOSITE		221569	7	348031	5	16506.1	128	349019	0	14.3	12.3
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11A COAL

GROUP COMPOSITE		2239	38	3572	27	282.5	NM	3798	23	64.7	15.5	
1	CYPRUS MINERALS	496	1019	60	1327	67	170.0	550	1600	39	14.4	17.3
2	PITTSBON	663	669	49	1583	15	36.8	NM	992	4	8.5	8.4
3	HERCO	763	551	7	662	5	75.6	26	1206	23	17.2	19.2

11B OIL & GAS

	GROUP COMPOSITE	201366	8	329469	4	15626.5	117	327709	0	14.6	12.7	
1	EXXON	2	59023	-3	80214	3	5260.0	9	71721	2	NA	16.8
2	AMOCO	10	20844	7	21157	5	2063.0	52	29919	19	12.1	15.7
3	MOBIL	11	20434	9	54877	7	2038.0	67	38820	-4	NA	13.3
4	CHEVRON	14	18645	15	28900	-1	1768.0	41	33485	-2	NA	11.9
5	ATLANTIC RICHFIELD	19	15627	9	18324	8	1583.0	29	21514	-6	NA	25.9
6	TEXACO	33	12917	18	35138	-1	1304.0	NM	26337	-22	NM	13.3
7	OCCIDENTAL PETROLEUM	55	7235	26	19417	14	313.0	70	20747	24	5.2	4.8
8	BURLINGTON RESOURCES	67	6583	NA	2167	-9	69.6	-70	5589	6	3.6	2.3
9	PHILLIPS PETROLEUM	88	5534	36	11304	5	650.0	1757	11968	-1	15.3	32.0
10	UNOCAL	105	4946	12	9154	5	24.0	-87	9508	-6	NM	1.2
11	SUN	151	3766	-39	10000	2	7.0	-98	11932	4	NM	0.1
12	SUN EXPLORATION & PRODUCTION	167	3357	NA	1286	-9	-305.0	NM	5429	NA	NM	-23.8
13	PENNZOIL	188	3022	-6	2124	17	-187.0	NM	4480	9	NM	-15.7
14	AMERADA HESS	193	2972	18	4264	-11	124.2	-46	4993	-8	NM	5.8
15	ASHLAND OIL	243	2349	21	7952	8	239.6	64	4322	6	14.5	20.0
16	HERR-McGEE	281	1981	7	2743	5	110.1	31	3123	0	NA	7.9
17	COASTAL	307	1829	48	8237	11	157.4	39	7640	-1	10.0	12.3



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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	18 ANADARKO PETROLEUM	401	1329	4	333	45	39.7	337	1490	4	7.7	8.9
	19 MAPCO	414	1281	22	1802	10	117.1	105	1376	1	16.1	20.0
	20 MURPHY OIL	431	1228	29	1525	1	38.7	NM	1973	-1	NM	5.4
	21 UNION TEXAS PETROLEUM	481	1068	12	1152	-10	109.3	95	1717	5	NA	41.0
	22 LOUISIANA LAND & EXPLORATION	488	1040	-5	726	-12	-70.2	NM	1429	-11	NA	-14.1
	23 AMERICAN PETROFINA	510	980	11	2635	6	132.9	60	1702	-6	14.0	16.5
	24 MAXUS ENERGY	642	696	0	575	-12	-61.6	NM	1797	-6	NA	NM
	25 HAMILTON OIL	647	693	1	195	-8	16.8	5	1080	27	NA	4.1
	26 MITCHELL ENERGY & DEVELOPMENT	673	649	22	581	3	0.4	-94	1939	-6	2.7	0.1
	27 DIAMOND SHAMROCK R&M	841	473	38	1804	4	54.3	472	843	2	13.1	15.3
	28 QUAKER STATE	852	458	-22	869	-4	14.9	NM	740	0	5.4	4.7
	29 SAN JUAN BASIN ROYALTY TRUST	897	408	10	15	-15	15.1	-15	99	-3	NM	15.3
	11C PETROLEUM SERVICES											
	GROUP COMPOSITE		17964	-4	14990	18	597.1	950	17513	-4	5.1	6.3
	1 SCHLUMBERGER	49	9109	-10	4925	12	453.9	-10	5600	-17	NA	12.1
	2 HALLIBURTON	175	3205	-11	4839	26	84.6	76	4772	12	4.9	4.0
	3 BAKER HUGHES	284	1971	-9	2336	16	58.1	NM	2100	-3	6.6	5.3
	4 OCEAN DRILLING & EXPLORATION	542	895	-12	406	4	-30.4	NM	1039	4	NA	-7.3
	5 CAMERON IRON WORKS	648	690	36	559	19	2.9	NM	762	-6	2.4	-0.8
	6 HELMERICH & PAYNE	718	595	-3	141	17	20.3	24	576	0	4.9	4.7
	7 CBI INDUSTRIES	783	530	-11	1376	19	27.5	50	1343	6	4.4	4.5
	8 NOBLE AFFILIATES	793	519	-14	192	1	11.8	-28	519	-12	6.0	6.0
	9 ROWAN	859	449	-18	217	51	-31.6	NM	801	-3	NA	-6.3
12	HEALTH CARE											
	INDUSTRY COMPOSITE		180512	10	114637	11	10871.2	46	105397	6	27.5	23.6
	12A DRUG DISTRIBUTION											
	GROUP COMPOSITE		6502	-1	20936	12	439.5	24	7342	8	13.2	15.5
	1 WALGREEN	262	2145	6	4980	12	135.0	24	1634	7	16.3	18.6
	2 RITE AID	397	1353	-10	2746	21	95.3	10	1413	13	14.3	15.7
	3 McKESSON	420	1267	-1	7052	8	91.1	21	2292	0	10.9	13.1
	4 LONGS DRUG STORES	634	705	-1	1925	9	55.9	14	493	4	18.7	18.7
	5 MEDCO CONTAINMENT SERVICES	770	548	-13	606	45	24.6	54	477	41	7.5	9.2
	6 BERGEN BRUNSWIG	829	485	37	3627	14	37.6	103	1033	13	11.7	16.4
	12B DRUGS & RESEARCH											
	GROUP COMPOSITE		107301	11	42442	12	6064.3	15	46861	8	26.7	25.9
	1 MERCK	7	25590	22	5940	17	1206.8	33	6128	8	37.5	45.2
	2 ELI LILLY	27	13832	17	4070	12	761.0	85	5263	1	NA	23.6
	3 AMERICAN HOME PRODUCTS	37	12438	4	5501	9	932.2	10	4611	0	NA	33.0
	4 PFIZER	46	9242	1	5385	9	791.3	15	7638	10	18.8	18.4
	5 SCHERING-PLOUGH	60	7031	14	2969	10	389.8	23	3426	8	26.3	24.3
	6 SQUIBB	68	6494	-7	2586	20	425.5	19	3083	11	32.2	32.1
	7 SMITHKLINE BECKMAN	71	6427	-13	4749	10	229.2	-60	5017	13	14.6	14.8
	8 WARNER-LAMBERT	91	5466	0	3908	14	340.3	15	2703	9	NA	36.2
	9 UPJOHN	92	5442	-7	2754	9	353.4	16	3139	3	19.0	20.0
	10 SYNTEX	104	4972	13	1336	12	318.9	17	1437	16	40.4	43.8
	11 MARION LABORATORIES	156	3616	5	827	19	181.0	45	627	41	47.5	39.2
	12 GENENTECH	358	1574	-56	323	48	20.6	-51	669	8	4.5	5.0

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It's Pontiac's purest expression of the ultimate American touring sedan. SSE boasts 165 horses of fuel-injected power packed into its 3.8-liter 3800 SFI V6 engine. Variable-ratio power rack-and-pinion steering, Goodyear Eagle GT-4 radial tires and 16x7" Aero-line cast aluminum wheels are all standard. A computer-controlled anti-lock brake system controls the brakes under adverse stopping conditions. Articulating front bucket seats with 14-way adjustable power allow fore-aft or forward-back tilt positions in addition to a full range of lumbar support adjustments. The Delco ETR® 8-speaker sound system features duplicate controls built into the hub of a 4-spoke leather-wrapped steering wheel. Buckle down behind the wheel and drive the cutting edge of road-car excitement... Bonneville SSE.

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COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
13 RORER GROUP	425	1260	7	1042	12	61.8	14	1388	12	9.5	14.8
14 ALZA	599	773	-11	84	19	17.0	22	248	8	8.2	11.1
15 AMGEN	633	705	27	77	56	1.3	-2	192	1	0.8	0.8
16 CARTER-WALLACE	708	607	-7	513	8	43.9	18	444	13	14.4	14.8
17 FOREST LABORATORIES	795	518	51	92	20	20.4	31	189	12	11.5	11.5
18 BOLAR PHARMACEUTICAL	816	494	8	128	34	30.7	73	138	86	25.6	25.6
19 LYPHOMED	849	460	54	128	-26	-21.1	NM	263	-3	NA	-16.0
20 CETUS	956	360	-5	31	-26	-39.6	NM	260	-10	NA	-30.7

12C HEALTH CARE SERVICES

GROUP COMPOSITE		12814	18	18033	5	823.3	68	19587	-4	17.8	13.7	
1	HOSPITAL CORP. OF AMERICA	158	3510	32	4111	-12	258.8	NM	5388	-13	10.8	16.4
2	HUMANA	209	2747	9	3580	17	231.6	20	3529	7	13.7	19.8
3	NATIONAL MEDICAL ENTERPRISES	275	2021	22	3433	15	174.4	11	3642	10	9.8	16.8
4	COMMUNITY PSYCHIATRIC CENTERS	432	1225	17	347	22	70.8	18	478	11	17.0	18.5
5	AMERICAN MEDICAL INTERNATIONAL	436	1204	-1	3017	9	76.5	-27	3323	-12	9.2	10.4
6	NATIONAL HEALTH LABORATORIES	603	767	NA	235	NA	37.7	NA	302	NA	NA	NA
7	MANOR CARE	788	524	4	565	10	-7.9	NM	810	9	NM	-4.1
8	BEVERLY ENTERPRISES	844	466	15	2025	-3	-23.9	NM	1844	-11	NM	-5.2
9	U. S. HEALTHCARE	977	350	-7	720	20	5.3	405	271	4	3.8	3.8

12D MEDICAL PRODUCTS

GROUP COMPOSITE		53896		7	33227		12	3544.1		174	31608		9	50.9		25.4
1	JOHNSON & JOHNSON	22	15257	4	9000	12	974.0	17	6900	3	25.0	27.8				
2	BRISTOL-MYERS	30	13344	3	5973	11	829.0	17	5190	10	NA	23.4				
3	ABBOTT LABORATORIES	38	11495	1	4937	13	752.0	19	4825	10	28.9	30.5				
4	BAXTER INTERNATIONAL	113	4757	-20	6861	10	388.0	20	8550	12	NA	12.1				
5	BECTON, DICKINSON	280	1989	-18	1823	14	157.2	19	2166	12	13.1	15.3				
6	SIGMA-ALDRICH	457	1141	1	375	23	56.5	35	323	21	NA	24.5				
7	C. R. BARD	459	1134	22	758	18	78.7	26	531	9	23.6	24.6				
8	MEDTRONIC	471	1101	-13	733	21	95.0	14	709	22	24.7	22.0				
9	A. H. ROBINS	681	637	-1	934	9	58.4	NM	1075	5	4.0	-3.9				
10	ACUSON	694	623	27	169	60	27.5	64	134	47	NA	27.0				
11	FISHER SCIENTIFIC GROUP	729	582	-15	958	5	38.3	24	566	0	11.9	12.1				
12	ST. JUDE MEDICAL	755	558	70	114	59	33.5	93	143	41	27.9	27.9				
13	BIOMET	809	501	73	124	84	17.0	66	107	13	NA	19.9				
14	STRYKER	907	394	10	179	21	15.9	25	125	19	18.0	18.3				
15	U. S. SURGICAL	925	382	-4	291	15	23.2	15	264	8	13.2	17.9				

13

HOUSING

INDUSTRY COMPOSITE	20649	7	20626	7	1625.6	12	23503	8	19.1	19.0
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13A BUILDING MATERIALS

GROUP COMPOSITE		16396		4	18003		5	1455.0		12	17291		5	20.4		20.7
1	PPG INDUSTRIES	103	4974	12	5617	8	467.6	24	5154	3	17.2	20.8				
2	MASCO	163	3397	-10	2439	21	288.3	32	3003	9	14.4	18.6				
3	VULCAN MATERIALS	324	1753	11	1053	14	136.0	19	960	2	20.2	21.8				
4	SHERWIN-WILLIAMS	458	1141	-11	1950	8	101.1	8	1259	4	15.8	16.6				
5	OWENS-CORNING FIBERGLAS	467	1113	35	2831	-2	197.0	-10	1596	0	41.9	-29.4				
6	CALMAT	544	892	-4	661	-1	56.4	-28	765	13	10.7	11.9				
7	TECUMSEH PRODUCTS	585	801	1	1094	15	70.2	-2	900	18	11.6	11.6				



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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN			
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1986 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %		
8	LAFARGE		594	793	17		1309	-	93.5	30	1206	6	11.6	13.9
9	LONE STAR INDUSTRIES		813	497	-5		371	-51	38.2	-5	1424	-5	NA	5.4
10	IDEAL BASIC INDUSTRIES		972	352	-36		228	-3	-19.7	NM	349	7	NA	-61.1
11	RPM		978	349	0		361	11	23.4	16	275	11	12.6	15.9
12	FOREST CITY ENTERPRISES		998	334	42		90	-15	3.0	-42	399	11	4.0	3.3

13B CONSTRUCTION & REAL ESTATE

GROUP COMPOSITE		4253	25	2622	25	170.6	18	6212	17	15.9	10.9	
1	ROUSE	409	1304	24	462	19	20.0	69	2080	19	5.6	26.5
2	ROCKEFELLER CENTER PROPERTIES	630	708	-4	125	18	44.7	-2	1527	17	NM	6.9
3	KOGER PROPERTIES	645	694	127	129	107	4.9	NM	643	80	2.8	5.7
4	NEW PLAN REALTY TRUST	866	435	15	39	6	24.4	21	190	2	NM	15.1
5	CENTEX	895	409	34	1730	26	31.9	22	1045	1	8.2	8.5
6	WEINGARTEN REALTY INVESTORS	963	356	3	65	6	21.3	20	350	5	NM	20.8
7	FIRST UNION REAL ESTATE	979	347	-11	73	-1	23.4	-10	377	1	NM	24.4

14 LEISURE TIME PRODUCTS

INDUSTRY COMPOSITE		75508	21	72702	17	4774.0	17	83934	25	18.4	18.2
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14A EATING PLACES

GROUP COMPOSITE		14808	20	13558	17	901.9	18	13071	10	12.3	16.3	
1	MCDONALD'S	45	9340	9	5568	14	645.9	18	8159	17	13.1	19.7
2	TW SERVICES	368	1515	70	3574	44	66.9	18	2100	-1	NA	13.5
3	WENDY'S INTERNATIONAL	723	589	-12	1063	0	28.5	21	754	-3	6.6	6.8
4	TCBY ENTERPRISES	804	509	22	98	42	19.8	52	93	45	26.5	30.6
5	LUBY'S CAFETERIAS	817	492	12	261	10	27.8	12	186	13	NA	18.8
6	BOB EVANS FARMS	854	456	-5	412	6	31.3	14	237	8	NA	15.6
7	MORRISON	858	449	24	744	19	28.9	24	291	5	15.3	16.5
8	COLLINS FOODS INTERNATIONAL	901	402	12	531	-9	28.8	39	381	-18	NA	13.4
9	CHURCH'S FRIED CHICKEN	950	364	43	420	6	-14.5	NM	324	-7	NM	-5.9
10	INTERNATIONAL DAIRY QUEEN	978	351	34	242	15	20.1	35	115	-3	25.0	34.8
11	JERRICO	990	340	19	647	5	18.4	-24	432	7	NA	7.9

14B ENTERTAINMENT

GROUP COMPOSITE		24673	34	13970	24	1161.1	36	20289	22	8.9	18.8	
1	WALT DISNEY	42	10296	22	3747	27	569.9	35	5751	50	17.5	22.8
2	WARNER COMMUNICATIONS	79	5983	44	4206	24	423.2	29	4154	19	NA	25.2
3	MCA	150	3760	18	3024	17	184.9	20	3840	12	7.8	10.2
4	COLUMBIA PICTURES ENTERTAINMENT	294	1898	NM	1170	NA	6.8	NA	3535	3	NM	NA
5	UNITED ARTISTS COMMUNICATIONS	408	1306	0	841	40	20.2	158	1488	39	4.6	13.8
6	MGM UA COMMUNICATIONS	579	818	72	663	39	-90.3	NM	1358	16	NM	-49.7
7	KING WORLD PRODUCTIONS	700	814	1	319	24	66.4	45	163	-14	328.1	606.1

14C HOTEL & MOTEL

GROUP COMPOSITE		10654	5	12728	9	725.8	-11	14778	17	24.6	31.8	
1	MARRIOTT	165	3386	-15	7370	13	232.0	4	6023	24	10.2	32.1
2	HILTON HOTELS	223	2607	19	954	13	130.9	-6	1893	33	14.4	16.6
3	CIRCUS CIRCUS ENTERPRISES	475	1076	10	512	12	72.5	17	529	-2	20.3	44.4
4	PRIME MOTOR INNS	543	895	-32	398	20	74.1	28	1002	42	10.6	18.0
5	HOLIDAY	588	797	14	1597	-4	117.2	-1	2139	-11	19.6	-17.6
6	CAESARS WORLD	618	736	26	856	4	64.8	11	848	2	15.9	31.3

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	7 RAMADA	863	437	57	539	8	4.4	NM	1020	16	3.2	1.5
	8 GOLDEN NUGGET	948	367	56	162	-35	-5.2	NM	1059	49	NM	-2.7
	9 CAESARS NEW JERSEY	969	354	28	340	6	35.1	38	266	0	21.7	21.3
	14D OTHER LEISURE											
	GROUP COMPOSITE		25374	19	32446	18	1985.3	21	35797	37	37.1	16.3
	1 EASTMAN KODAK	24	14872	8	17034	28	1397.0	19	22964	59	12.1	21.1
	2 POLAROID	184	3052	44	1863	6	-22.6	NM	1957	22	-0.8	-2.2
	3 BRUNSWICK	369	1512	-27	3282	6	193.1	14	2092	10	NA	20.5
	4 HASBRO	531	928	19	1358	1	72.4	50	1112	3	11.1	10.3
	5 AMERICAN GREETINGS	624	728	31	1246	8	30.7	-36	1177	-6	6.2	5.5
	6 FLEETWOOD ENTERPRISES	653	678	36	1567	13	67.7	48	638	25	NA	18.0
	7 OUTBOARD MARINE	693	624	1	1653	20	70.7	27	1284	20	11.8	12.2
	8 BLOCKBUSTER ENTERTAINMENT	697	620	318	137	217	15.5	279	132	204	16.8	16.6
	9 BALLY MFG.	713	599	27	1941	12	38.0	NM	2806	10	6.5	5.1
	10 MATTEL	766	550	62	990	-3	35.9	NM	693	-10	17.1	27.5
	11 COLEMAN	832	483	77	658	10	24.5	28	435	8	10.8	12.0
	12 GIBSON GREETINGS	945	371	54	404	12	35.0	45	326	13	20.7	20.4
	12 CPI	959	358	1	313	11	27.3	22	181	14	NA	21.8
15	MANUFACTURING											
	INDUSTRY COMPOSITE		50433	11	69347	19	3808.2	53	58453	14	14.2	15.2
	15A GENERAL MANUFACTURING											
	GROUP COMPOSITE		18961	15	19721	15	1336.4	33	16085	10	18.6	17.4
	1 CORNING GLASS WORKS	189	3010	19	2122	2	292.4	55	2898	9	15.5	18.7
	2 EMHART	230	2566	76	2763	13	126.6	19	2427	20	10.1	14.0
	3 RUBBERMAID	282	1977	10	1194	18	99.3	17	782	9	18.9	19.4
	4 ILLINOIS TOOL WORKS	320	1775	-10	1930	14	140.0	32	1380	3	16.0	18.8
	5 HILLENBRAND INDUSTRIES	497	1016	-9	884	22	69.7	21	735	11	17.0	19.7
	6 AVERY INTERNATIONAL	501	1003	-1	1582	8	77.7	24	1119	7	12.7	15.3
	7 MORTON	503	1000	1	1410	12	85.2	38	1088	5	NA	15.0
	8 HEWELL	620	729	66	988	37	61.4	65	820	-3	NA	21.4
	9 JOSTENS	646	693	-14	609	15	46.3	28	399	8	18.5	24.4
	10 ENVIRODYNE INDUSTRIES	658	673	73	488	3	48.2	25	449	9	19.8	30.5
	11 HARSCO	666	658	-31	1300	8	31.1	-51	893	11	6.9	7.0
	12 TRINITY INDUSTRIES	715	598	13	817	40	25.4	249	669	25	8.5	11.6
	13 A. T. CROSS	753	563	10	228	22	35.4	23	176	13	NA	27.2
	14 PHILIPS INDUSTRIES	764	551	-8	869	29	45.7	7	472	38	15.4	18.7
	15 CRANE	765	550	-24	1313	19	49.2	50	746	9	NA	17.7
	16 KEYSTONE INTERNATIONAL	780	533	11	346	18	31.9	43	340	3	14.5	18.5
	17 SEALED AIR	939	375	-1	346	14	25.3	24	256	12	NA	16.5
	18 WATTS INDUSTRIES	965	355	17	206	26	21.5	26	194	17	15.1	16.7
	19 TELEFLEX	996	336	21	328	21	24.0	22	242	10	15.1	18.4
	15B MACHINE & HAND TOOLS											
	GROUP COMPOSITE		5685	12	7604	13	407.0	144	5916	7	12.0	15.4
	1 SNAP-ON TOOLS	370	1508	-13	855	13	113.3	28	668	8	NA	22.5
	2 BLACK & DECKER	393	1372	14	2374	18	104.3	62	1929	16	14.9	13.7
	3 STANLEY WORKS	400	1332	1	1909	8	103.5	7	1405	1	11.8	14.8
	4 CLARK EQUIPMENT	727	584	25	1278	21	44.1	NM	952	8	NA	11.3
	5 CINCINNATI MILACRON	756	557	-9	858	4	25.0	NM	721	-5	NM	NA
	6 VERMONT AMERICAN	1000	332	58	330	13	16.8	-9	241	15	11.1	13.0
	15C SPECIAL MACHINERY											
	GROUP COMPOSITE		22623	5	36339	21	1857.3	64	32003	16	13.7	14.3
	1 CATERPILLAR	83	819	-15	10435	26	616.0	93	9686	27	14.1	15.0
	2 DEERE	147	1000	25	5461	16	296.3	24	5703	12	13.5	12.1
	3 DRESSER INDUSTRIES	235	2488	7	3989	25	135.7	233	2899	1	9.4	9.0
	4 INGERSOLL-RAND	298	1945	-11	3021	14	161.6	50	2483	10	11.4	13.0



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5	DOVER	298	1874	-12	1954	23	145.8	31	1366	18	21.2	20.3
6	TYCO LABORATORIES	372	1490	55	1792	43	82.0	60	1413	55	10.5	18.4
7	FMC	433	1220	21	3287	5	129.2	-32	2749	6	25.4	-49.6
8	TIMKEN	512	979	-3	1554	26	65.9	539	1593	9	6.9	6.8
9	HARNISCHFEGGER INDUSTRIES	802	509	-9	1248	22	38.5	190	1195	12	11.1	8.3
10	MORDSON	851	458	20	256	20	33.1	26	173	2	33.8	37.2
11	INTERLAKE	889	413	-16	892	8	39.6	-27	660	-5	NA	14.8
12	GOULDS PUMPS	906	395	11	454	18	23.3	26	366	7	12.3	12.0
13	BRIGGS & STRATTON	911	392	-13	903	4	14.2	-53	621	19	NA	5.0
14	APPLIED MATERIALS	912	392	-5	405	100	47.8	534	339	46	NA	23.8
15	IMO INDUSTRIES	980	347	34	687	87	28.3	51	756	25	7.6	10.0
15D TEXTILES												
GROUP COMPOSITE			3164	41	5773	26	207.6	16	4449	29	9.3	12.6
1	WEST POINT-PEPPERELL	341	1690	59	2367	34	78.2	12	2358	62	7.4	10.1
2	SPRINGS INDUSTRIES	655	678	13	1825	10	52.8	-5	1118	3	8.9	9.8
3	ALBANY INTERNATIONAL	882	421	20	461	15	36.3	44	477	14	14.1	22.2
4	SHAW INDUSTRIES	933	376	30	1120	49	40.3	46	496	-1	14.7	23.7
16 METALS & MINING												
INDUSTRY COMPOSITE			34834	15	45144	23	4504.1	99	43827	10	19.1	24.0
16A ALUMINUM												
GROUP COMPOSITE			10371	28	19306	25	2084.3	315	19713	31	19.6	26.8
1	ALUMINUM CO. OF AMERICA	95	5374	30	9795	26	861.4	285	10606	57	16.0	19.8
2	REYNOLDS METALS	194	2950	19	5567	30	482.0	140	5032	17	17.5	23.6
3	AMAX	272	2047	10	3944	17	740.9	862	4076	3	NM	53.5
16B STEEL												
GROUP COMPOSITE			7795	24	17030	18	1128.1	114	13284	4	16.1	20.1
1	BETHLEHEM STEEL	304	1837	25	5489	19	391.6	277	4449	-7	NM	25.1
2	INLAND STEEL INDUSTRIES	380	1455	32	4068	18	248.8	123	2925	10	13.0	15.1
3	NUCOR	490	1038	13	1061	25	109.4	117	889	47	NA	23.0
4	ARMCO	537	911	-11	3227	10	130.1	-7	2788	0	13.8	14.6
5	WORTHINGTON INDUSTRIES	554	868	2	961	13	61.4	31	512	12	18.3	20.2
6	ALLEGHENY LUDLUM	556	864	49	1208	39	108.6	135	719	40	30.6	37.9
7	CARPENTER TECHNOLOGY	860	449	9	608	23	33.0	342	646	8	9.7	10.5
8	CHAPARRAL STEEL	941	374	NA	408	19	45.1	116	356	NA	22.4	32.4
16C OTHER METALS												
GROUP COMPOSITE			16668	5	8808	29	1291.7	5	10830	-10	22.5	23.8
1	NEWMONT GOLD	154	3671	-5	389	47	108.1	26	511	79	33.1	32.5
2	NEWMONT MINING	211	2710	18	500	38	96.7	-69	1715	-60	NA	-29.2
3	PHELPS DODGE	340	1712	32	2320	44	420.2	179	2755	22	22.4	NA
4	HOMESTAKE MINING	388	1413	-5	433	-16	63.3	-57	967	31	NA	8.5
5	ASARCO	460	1129	6	1988	47	207.2	-19	2223	7	14.6	15.7
6	BATTLE MOUNTAIN GOLD	487	1040	-5	141	15	59.4	25	192	63	34.9	35.6
7	AMAX GOLD	520	953	7	104	56	29.7	5	146	53	NA	45.1
8	FMC GOLD	607	761	3	171	12	61.2	23	129	12	68.4	67.2
9	FREEPORT-MCMORAN COPPER	611	752	NA	335	76	94.2	117	291	47	NA	67.3
10	INSPIRATION RESOURCES	735	579	35	1436	10	42.0	672	842	-6	11.1	10.3

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	11 FREEPORT-McMORAN GOLD	768	548	6	106	5	28.5	-17	169	20	20.6	19.0
	12 PRECISION CASTPARTS	796	515	-23	437	8	32.0	-11	343	23	14.0	17.3
	13 BRUSH WELLMAN	810	501	-2	346	12	32.5	24	358	-3	12.7	13.0
	14 HECLA MINING	923	385	5	102	17	16.6	61	189	7	NA	11.7

17

NONBANK FINANCIAL

INDUSTRY COMPOSITE 149706 18 281402 11 15594.6 9 1368359 14 18.3 14.2

17A FINANCIAL SERVICES

GROUP COMPOSITE		57460	20	101225	18	5641.4	35	687468	15	22.1	18.3	
1	AMERICAN EXPRESS	35	12556	13	22934	30	988.0	135	142704	23	28.1	21.0
2	LOEWS	69	6474	13	10865	17	890.4	36	25467	17	18.2	23.4
3	FEDERAL NATL. MORTGAGE ASSN.	102	5015	81	10635	6	506.7	35	112314	9	10.6	23.9
4	MARSH & MCLENNAN	128	4272	7	2272	6	296.3	-2	1830	12	40.8	39.8
5	STUDENT LOAN MARKETING ASSN.	164	3387	18	2172	37	225.1	24	28628	25	8.5	36.8
6	SALOMON	172	3269	9	6146	2	280.0	97	85256	14	26.6	7.5
7	MERRILL LYNCH	200	2842	7	10547	7	463.2	25	62457	5	NA	13.3
8	TRANSAMERICA	229	2567	-7	7879	8	346.4	-1	26759	15	10.5	12.8
9	MORGAN STANLEY GROUP	236	2476	72	4109	31	394.6	71	40527	7	69.9	31.7
10	SHEARSON LEHMAN HUTTON	317	1796	4	10529	56	96.5	-4	84800	27	63.9	5.5
11	H&R BLOCK	381	1454	-7	853	10	90.2	21	485	15	NA	24.5
12	TELERATE	406	1316	-24	440	31	91.2	21	543	15	NA	26.8
13	BEAR STEARNS	422	1262	16	1897	NA	144.9	NA	37901	NA	43.0	NA
14	DREYFUS	446	1164	-5	268	-6	90.9	-5	673	2	15.6	15.4
15	BENEFICIAL	498	1013	0	1418	10	105.0	-24	7431	6	NA	12.8
16	ALEXANDER & ALEXANDER	511	980	5	1228	4	71.0	-5	2609	-2	14.5	19.7
17	PRIMERICA	527	933	-41	1004	10	161.8	59	4445	5	14.8	22.0
18	FRANKLIN RESOURCES	613	747	45	213	2	68.5	11	352	9	40.5	41.4
19	EQUIFAX	667	658	-3	743	11	34.0	11	421	54	NA	15.7
20	UNITED INVESTORS MANAGEMENT	758	557	93	282	24	41.9	21	639	29	13.2	14.5
21	CORROON & BLACK	773	545	-4	425	8	115.9	160	953	17	NA	55.1
22	ALLEGHANY	779	533	12	1006	-7	46.0	-30	1630	5	8.9	8.6
23	PAINWEBBER GROUP	798	514	-4	2512	3	42.4	-43	17222	-3	38.2	2.4
24	A. G. EDWARDS	874	429	16	475	-13	29.2	-38	1029	21	10.8	10.0
25	POLICY MANAGEMENT SYSTEMS	954	361	-11	217	21	20.5	20	289	3	NA	14.3
26	TELECREDIT	986	342	-27	156	12	1.0	-92	107	22	NA	1.6

17B INSURANCE

GROUP COMPOSITE		85580	17	165218	6	8963.5	-1	521606	12	11.8	12.7	
1	AMERICAN INTERNATIONAL GROUP	34	12729	32	13087	18	1175.1	24	37273	27	NA	17.6
2	GENERAL RE	80	5962	18	2736	-12	518.5	13	9306	-4	NA	19.5
3	BERKSHIRE HATHAWAY	85	5633	51	2026	-6	285.7	56	6206	9	8.6	9.5
4	AETNA LIFE & CASUALTY	87	5583	8	24296	5	667.7	-23	81533	8	10.1	10.3
5	AMERICAN GENERAL	133	4147	-12	3823	12	413.0	6	30422	20	NA	9.4
6	CIGNA	134	4126	6	17889	5	410.2	-35	55825	3	NA	7.5
7	TRAVELERS	146	3933	5	18986	5	429.6	0	53332	-1	NA	9.2
8	CNA FINANCIAL	155	3652	-1	8204	15	404.1	-4	22941	17	NM	12.0
9	CHUBB	217	2662	7	3981	7	372.6	8	9741	13	NA	16.5
10	USF&G	226	2578	-1	5582	16	305.7	-18	12361	22	14.8	16.0
11	ST. PAUL	263	2144	2	3631	8	349.3	8	10382	17	NA	17.3
12	LINCOLN NATIONAL	274	2025	-1	7312	5	185.3	-22	20663	13	NM	8.6
13	GEICO	289	1930	-2	1757	8	134.4	-10	3061	2	16.6	20.1
14	AON	311	1815	8	2732	11	204.4	10	8266	17	14.3	16.7
15	TORCHMARK	326	1745	-7	1670	5	185.2	-8	4428	3	15.5	21.4
16	CONTINENTAL CORP.	327	1745	-26	5878	1	124.0	-62	13302	8	NA	5.0
17	KEMPER	331	1738	26	3135	4	205.6	6	12078	12	13.3	12.3
18	SAFECO	332	1736	5	3018	11	234.8	12	7732	17	14.7	15.1
19	FIREMAN'S FUND	364	1550	-9	3691	-17	247.0	-18	11190	6	NA	16.6
20	CAPITAL HOLDING	371	1504	-3	2046	15	189.9	6	13000	25	NA	16.5
21	AMERICAN FAMILY	412	1287	1	2325	24	108.9	17	6074	21	14.0	17.0
22	UNUM	417	1271	27	2199	5	129.3	52	8100	10	9.5	9.5



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
23	JEFFERSON-PILOT	418	1267	-4	1223	4	97.5	7	4174	6	7.3	7.3
24	FIRST EXECUTIVE	438	1199	33	3049	-12	196.5	13	18225	11	10.6	10.5
25	PROVIDENT LIFE & ACCIDENT	491	1033	38	2827	12	85.3	451	10723	13	NA	8.1
26	AMERICAN NATIONAL INSURANCE	500	1003	15	934	9	94.2	4	4303	3	NA	NA
27	CINCINNATI FINANCIAL	509	983	25	910	3	124.6	37	2118	18	16.6	16.0
28	MBIA	541	899	51	151	11	92.0	24	1283	11	NA	13.5
29	OHIO CASUALTY	563	852	8	1576	0	128.0	63	2922	9	19.3	21.4
30	HARTFORD STEAM BOILER	566	848	43	459	7	70.7	17	730	4	23.5	27.8
31	PROGRESSIVE	592	794	-2	1215	22	108.1	20	2307	29	16.9	27.6
32	FGIC	628	717	60	112	-11	75.2	20	955	17	NA	14.1
33	USLIFE	661	672	3	1279	8	67.7	-9	4063	7	7.7	7.3
34	HANOVER INSURANCE	748	565	10	1580	9	119.9	27	2604	16	19.5	19.6
35	HOME GROUP	848	462	4	2978	19	81.4	-32	13302	107	NM	8.3
36	OLD REPUBLIC INTERNATIONAL	864	437	8	1102	1	51.0	-50	3006	7	NA	NA
37	FOREMOST CORP. OF AMERICA	867	435	-20	460	-3	24.5	-26	808	-14	NA	12.5
38	A. L. WILLIAMS	883	417	-1	402	44	96.1	151	592	25	34.2	49.7
39	RELIANCE GROUP HOLDINGS	902	401	-27	3730	11	23.6	-81	9000	25	NM	6.2
40	ZENITH NATIONAL INSURANCE	924	384	0	509	8	45.4	5	1007	10	15.1	15.5
41	W. R. BERKLEY	930	378	11	534	2	58.8	9	1201	16	16.6	19.9
42	HOME BENEFICIAL	993	338	20	188	2	42.5	12	1069	5	NA	NA

17C SAVINGS & LOAN

GROUP COMPOSITE 6667 16 14960 17 989.7 1 159306 19 8.0 12.2

1	GREAT WESTERN FINANCIAL	277	2018	17	3165	11	248.4	17	32815	15	6.8	12.7
2	H. F. AHMANSON	346	1654	8	3517	34	202.0	-5	40258	32	11.0	10.8
3	GOLDEN WEST FINANCIAL	466	1115	31	1410	11	138.3	-10	16721	31	6.9	16.1
4	HOMEFED	641	698	30	1579	21	111.3	11	17009	21	7.2	12.1
5	GLENFED	705	609	-9	2474	10	154.9	16	25025	8	5.7	14.1
6	CALFED	738	574	-12	2816	13	134.8	-19	27479	12	6.7	9.7

18 OFFICE EQUIPMENT & SERVICES

INDUSTRY COMPOSITE 163003 -1 172268 13 13095.7 8 169521 9 12.6 15.0

18A BUSINESS MACHINES & SERVICES

GROUP COMPOSITE 9784 -4 8914 12 695.6 10 9068 11 16.5 18.7

1	PITNEY-BOWES	168	3330	-7	2650	14	237.0	21	4788	19	14.4	18.8
2	DELUXE	254	2252	-5	1196	26	143.4	-3	786	-9	26.5	26.5
3	JOHN H. HARLAND	582	806	3	333	5	53.3	12	295	11	NA	22.3
4	ESSELTE BUSINESS SYSTEMS	627	718	-11	1402	13	58.9	4	1073	4	11.7	13.4
5	STANDARD REGISTER	777	536	-25	675	1	38.1	-6	444	4	11.9	13.2
6	HERMAN MILLER	781	531	-16	765	18	44.2	16	487	18	15.1	17.1
7	WALLACE COMPUTER SERVICES	808	505	14	408	12	33.9	20	307	13	NA	15.5
8	DENNISON MFG.	896	408	-3	722	2	38.1	9	482	-3	14.3	16.0
9	NEW ENGLAND BUSINESS SERVICE	973	352	-23	231	14	22.8	4	130	9	21.4	22.5
10	HON INDUSTRIES	981	347	-4	532	3	25.8	10	276	11	14.1	19.8

18B COMPUTERS & PERIPHERALS

GROUP COMPOSITE 130552 -1 144619 12 10775.5 6 142495 7 12.4 14.3

1	INTERNATIONAL BUSINESS MACHINES	1	66346	-3	59681	8	5491.0	4	73037	4	12.3	13.9
2	DIGITAL EQUIPMENT	32	13318	-6	12285	18	1209.1	-6	10231	9	16.2	16.0
3	HEWLETT-PACKARD	36	12553	-19	10296	21	830.0	17	7804	7	NA	18.3
3	XEROX	76	6172	8	16441	9	387.8	-33	12174	8	7.9	6.5



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You are guaranteed the freedom to succeed.

You are free to dream your own dream of success, to study, to work, to create and discover and build, for yourself and your children, the success you want.

Our deep belief in that idea is one reason that our company—Citicorp and Citibank—has grown to become by far the nation's largest financial services organization.

For over 175 years, our freedom to innovate, to create new financial ideas and services, has led to an unbroken line of initiatives allowing us to help countless millions of individuals.

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More are getting what they want with the help of MasterCard® and Visa cards from Citibank than from any other company.

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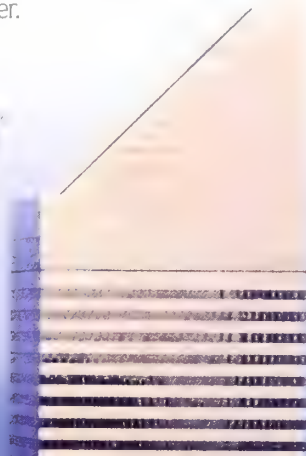
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THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
4 NCR	122	4439	-15	5990	6	439.3	5	4717	4	17.4	19.6
5 UNISYS	126	4302	-17	9902	2	680.6	18	11535	6	11.2	16.3
6 APPLE COMPUTER	127	4296	-23	4434	46	419.3	50	2276	40	36.7	36.7
7 TANDY	145	3937	9	3992	9	321.3	11	2877	19	NA	17.4
8 COMPAQ COMPUTER	215	2674	47	2066	69	255.2	87	1590	76	24.6	31.3
9 TANDEM COMPUTERS	310	1816	1	1425	31	102.1	0	1329	25	NA	11.4
10 AMDAHL	313	1807	0	1802	20	213.8	51	1931	28	20.1	21.2
11 CRAY RESEARCH	329	1740	-31	756	10	156.6	7	991	10	20.4	22.9
12 WANG LABORATORIES	382	1447	-30	3075	1	50.3	-47	2911	4	4.9	3.2
13 SUN MICROSYSTEMS	423	1262	5	1462	93	89.6	87	973	53	19.7	18.8
14 CONTROL DATA	559	861	-26	3628	8	1.7	-93	2524	-2	2.2	0.1
15 PRIME COMPUTER	564	851	3	1595	66	13.0	-80	1651	24	4.5	2.4
16 STRATUS COMPUTER	776	538	2	265	44	29.3	51	184	35	NA	22.9
17 COMMODORE INTERNATIONAL	778	535	NA	965	18	69.0	131	681	17	22.2	33.1
18 ZENITH ELECTRONICS	819	491	8	2686	14	5.3	NM	1428	4	2.8	1.1
19 DATA GENERAL	833	483	-29	1330	2	-48.9	NM	1049	-3	NM	-8.1
20 SYMBOL TECHNOLOGIES	983	346	-11	93	59	20.6	118	140	24	16.9	17.6
21 ATARI	992	339	-24	452	25	39.4	-15	464	37	15.6	22.7

18C COMPUTER SOFTWARE & SERVICES

GROUP COMPOSITE 22668 -1 18737 22 1624.7 18 17959 19 12.8 20.1

1 COMPUTER ASSOCIATES INTL.	190	3000	29	925	43	142.4	70	1156	47	NA	23.6
2 AUTOMATIC DATA PROCESSING	216	2673	-24	1617	10	178.2	19	1593	-1	16.6	19.4
3 MICROSOFT	233	2513	-19	719	57	151.4	63	605	47	NA	32.5
4 ELECTRONIC DATA SYSTEMS	NR	2214	2	4844	9	384.1	19	3416	10	NA	29.1
5 ORACLE SYSTEMS	373	1488	44	395	111	56.3	142	321	84	NA	34.1
6 LOTUS DEVELOPMENT	519	957	-27	469	18	58.9	-18	399	50	NA	22.1
7 COMDISCO	521	946	2	1356	10	91.0	15	3687	21	7.4	19.3
8 MOVELL	552	869	41	307	52	34.6	61	227	76	NA	25.6
9 INTERGRAPH	567	840	-48	800	25	88.0	26	831	18	13.9	13.9
10 COMPUTER SCIENCES	602	768	5	1253	11	49.5	22	715	14	11.9	12.9
11 AUTODESK	643	695	17	117	48	32.7	59	159	35	NA	23.6
23 3COM	650	687	7	310	57	29.3	63	220	27	NA	16.7
13 DIEBOLD	728	584	-3	451	3	31.3	-12	455	-2	NA	8.7
14 MENTOR GRAPHICS	760	556	29	301	36	33.5	65	288	26	NA	16.0
15 SEAGATE TECHNOLOGY	782	531	-51	1351	26	-5.5	NM	971	-2	NM	-1.4
16 STORAGE TECHNOLOGY	828	485	6	874	17	44.2	133	800	4	NM	17.6
17 ASHTON-TATE	830	485	-33	307	15	47.8	11	293	39	22.0	22.2
18 ADOBE SYSTEMS	865	437	38	83	112	21.1	135	65	103	46.7	47.6
19 SHARED MEDICAL SYSTEMS	884	416	-36	379	-3	29.4	-35	282	-12	17.1	17.3
20 GERBER SCIENTIFIC	887	413	-6	288	13	31.7	13	238	-4	18.6	19.3
21 FIRST FINANCIAL MANAGEMENT	891	412	-20	424	142	29.3	152	525	192	7.8	12.0
22 SYSTEMATICS	946	368	8	194	21	17.1	31	109	-7	24.0	24.5
23 WESTERN DIGITAL	999	333	-29	973	70	48.3	11	604	64	NA	16.6

19

PAPER & FOREST PRODUCTS

INDUSTRY COMPOSITE 44511 4 74018 14 5506.9 40 76899 13 15.9 17.2

19A FOREST PRODUCTS

GROUP COMPOSITE 13564 -1 27123 11 1616.9 22 29395 16 11.7 15.6

1 WEYERHAEUSER	96	5371	-9	10004	13	564.4	26	15387	19	11.1	13.5
2 GEORGIA-PACIFIC	143	3978	1	9509	11	467.0	2	7114	21	11.4	17.7

COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
3 BOISE CASCADE	295	1892	-14	4095	7	289.1	58	3610	6	13.4	17.1
4 LOUISIANA-PACIFIC	447	1163	2	1799	9	135.2	14	1853	-4	10.2	11.9
5 WILLAMETTE INDUSTRIES	450	1159	-4	1716	20	161.1	33	1430	21	16.0	21.6

19B PAPER

GROUP COMPOSITE

30947 6

46895 16

3890.1 50

47504 11

19.7 18.0

1 INTERNATIONAL PAPER	100	5152	10	9535	23	754.0	85	8818	9	13.2	16.4
2 KIMBERLY-CLARK	111	4830	4	5394	10	378.6	16	4268	7	16.8	20.3
3 SCOTT PAPER	191	2994	5	4726	15	400.9	71	5156	15	15.2	21.8
4 CHAMPION INTERNATIONAL	192	2976	-13	5129	11	456.4	19	6700	8	11.0	14.1
5 UNION CAMP	241	2367	-8	2661	13	295.1	42	3094	6	NA	19.8
6 JAMES RIVER CORP. OF VIRGINIA	242	2351	14	5623	15	239.8	23	5402	11	7.8	11.3
7 MEAD	251	2305	-6	4464	6	364.1	67	3541	21	18.4	23.8
8 GREAT NORTHERN NENOSOA	259	2188	-10	3588	39	341.7	70	3821	8	15.2	22.3
9 WESTVACO	308	1828	-10	2187	11	211.4	29	2634	18	12.4	16.0
10 CONSOLIDATED PAPERS	360	1558	5	897	21	149.9	56	935	16	NA	20.9
11 BOWATER	507	985	-25	1410	15	164.3	103	1810	13	16.1	19.7
12 P. H. GLATFELTER	518	960	15	569	34	82.2	49	663	8	22.9	25.9
13 CHESAPEAKE	856	452	10	711	5	51.5	71	662	12	12.7	19.3

20

PUBLISHING & BROADCASTING

INDUSTRY COMPOSITE

89988 20

49169 11

3396.3 14

71055 14

12.3 15.7

20A BROADCASTING

GROUP COMPOSITE

36289 32

15443 16

509.1 82

33189 17

6.1 5.7

1 CAPITAL CITIES/ABC	64	6837	15	4773	8	387.1	39	5909	14	10.7	13.4
2 TELE-COMMUNICATIONS	116	4614	8	2134	51	-0.8	NM	7618	23	-0.1	-0.1
3 LIN BROADCASTING	124	4369	49	226	8	82.1	48	573	-8	20.8	19.7
4 AMERICAN TV & COMMUNICATIONS	125	4304	58	812	14	70.4	42	1508	26	10.7	29.4
4 CBS	140	4012	2	2778	1	283.4	108	4579	22	10.9	12.3
5 VIACOM	268	2108	56	1259	25	-123.1	NM	3980	1	NM	-51.3
6 UNITED CABLE TELEVISION	348	1648	31	284	18	0.3	NM	824	29	1.7	0.3
7 COMCAST	410	1290	10	412	59	-19.7	NM	1609	55	NM	-8.4
8 TURNER BROADCASTING	444	1173	103	807	24	-94.5	NM	1823	-1	NM	NM
9 CENTEL CABLE TELEVISION	452	1156	161	154	18	8.5	1906	550	9	2.8	2.5
10 MULTIMEDIA	499	1007	38	440	7	26.9	115	405	-1	38.1	-4.9
11 CABLEVISION SYSTEMS	558	863	26	493	65	-159.4	NM	1172	70	NM	NM
12 CENTURY COMMUNICATIONS	583	804	52	175	16	-8.5	NM	830	55	NM	NM
13 CHRIS-CRAFT INDUSTRIES	625	721	79	251	4	21.4	103	870	1	8.7	22.6
14 SCRIPPS HOWARD BROADCASTING	719	594	-24	275	17	16.5	29	609	8	7.1	11.3
15 TCA CABLE TV	880	423	7	71	14	10.6	82	135	-2	13.9	17.8
16 UNITED TELEVISION	949	366	31	101	5	7.9	19	193	3	12.9	14.0

20B PUBLISHING

GROUP COMPOSITE

53700 12

33726 9

2887.1 7

37866 11

22.2 20.6

1 DUN & BRADSTREET	48	9168	17	4267	13	499.0	14	5024	34	NA	24.6
2 TIME	66	6611	21	4507	7	289.0	16	4593	6	NA	21.4
3 GANNETT	78	6002	-5	3314	8	364.5	14	3793	8	14.2	21.4
4 TIMES MIRROR	117	4549	-9	3333	6	331.9	25	3380	12	14.6	20.7
5 MCGRAW-HILL	176	3203	13	1818	4	185.5	13	1758	7	21.1	20.9
6 DOW JONES	182	3088	-8	1603	22	228.2	12	2112	9	19.2	23.2
7 TRIBUNE	187	3030	-5	2335	9	210.4	49	2942	7	NA	18.0
8 AFFILIATED PUBLICATIONS	201	2835	28	534	9	-80.9	NM	425	-20	NM	-34.4
9 WASHINGTON POST	208	2748	-4	1368	4	269.1	44	1422	19	28.4	32.4
10 KNIGHT-RIDDER	246	2337	-7	2083	6	146.8	-1	2357	23	10.6	16.5
11 NEW YORK TIMES	270	2080	-20	1700	4	161.0	3	1915	12	14.2	18.4
12 E. W. SCRIPPS	366	1526	NA	1214	6	70.1	55	1562	2	9.4	11.5
13 MEDIA GENERAL	506	987	49	756	6	8.8	-79	859	4	3.8	3.5
14 COMMERCE CLEARING HOUSE	523	943	-17	625	11	49.5	-6	494	15	NA	22.6



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN					
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %				
15	HOUGHTON MIFFLIN		668	657	33		368	7		24.1	2		294	6	NA	12.7
16	LEE ENTERPRISES		689	627	-6		257	6		41.5	18		320	6	19.2	24.8
17	HARCOURT BRACE JOVANOVIĆ		714	598	15		1268	16		-53.5	NM		2140	6	NM	NM
18	MEREDITH		722	591	10		747	19		31.8	-31		700	8	8.8	8.5
19	A. H. BELO		812	498	-1		385	1		10.1	-61		726	-1	NA	4.3
20	McCLATCHY NEWSPAPERS		831	484	13		356	7		28.8	21		344	6	11.3	11.5
21	TOPPS		903	400	87		183	13		23.7	-1		106	2	55.5	-32.9
22	PARK COMMUNICATIONS		928	380	-4		160	7		19.1	12		248	6	NA	11.8
23	WESTERN PUBLISHING GROUP		960	358	17		543	29		28.9	71		356	10	NA	18.1

21

SERVICE INDUSTRIES

INDUSTRY COMPOSITE 44489 7 45051 19 1984.1 24 42478 25 14.6 13.4

31A CONSTRUCTION & ENGINEERING

GROUP COMPOSITE 6462 5 16499 15 -174.3 NM 12492 3 -2.5 -5.2

1	FLUOR	303	1838	23		5514	36		69.0	NM			2073	1	12.1	11.5
2	COMBUSTION ENGINEERING	486	1045	-24		3484	15		-245.2	NM			2546	-8	NM	-41.3
3	EG&G	528	931	-8		1406	11		68.7	19			539	0	24.5	23.8
4	McDERMOTT INTERNATIONAL	571	656	-13		2308	-2		-119.6	NM			3446	-11	NA	-19.0
5	FOSTER WHEELER	706	609	23		1054	-14		28.5	846			1109	3	NA	6.5
6	STONE & WEBSTER	746	566	4		324	2		41.2	-16			560	-1	10.9	11.3
7	MORRISON KNUDSEN	853	458	-		1939	10		-37.0	NM			1746	125	NA	-14.5
8	THERMO ELECTRON	955	360	24		501	31		20.1	11			474	15	8.4	11.7

31B INDUSTRIAL DISTRIBUTION

GROUP COMPOSITE 7921 -5 8671 16 499.1 24 4549 9 15.6 17.2

1	GENUINE PARTS	202	2824	-8		2942	13		181.4	22			1141	11	NA	21.8
2	W. W. GRAINGER	374	1484	-14		1535	16		108.8	20			936	13	17.1	17.2
3	PREMIER INDUSTRIAL	478	1073	-18		566	16		68.3	22			263	-21	32.8	33.8
4	SAFETY-KLEEN	533	926	-6		417	25		42.3	21			399	27	15.6	20.9
5	AVNET	595	789	-15		1934	16		50.7	36			1100	1	6.5	7.1
6	AAR	857	451	14		384	23		23.1	29			329	23	13.7	14.5
7	UNITED STATIONERS	936	375	9		894	17		24.6	49			381	19	NA	15.6

31E POLLUTION CONTROL

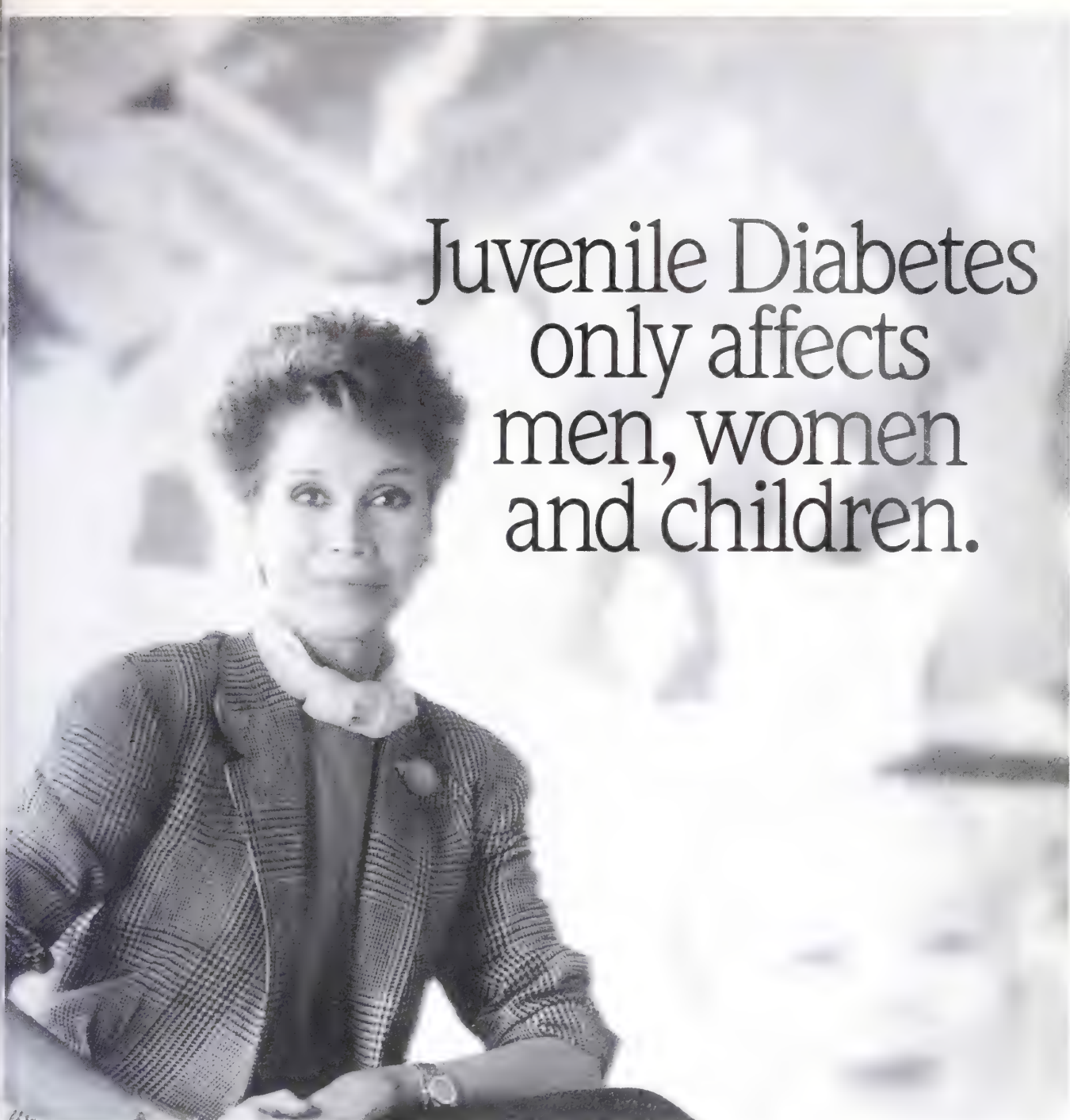
GROUP COMPOSITE 19690 17 8204 26 935.4 37 9967 35 17.1 20.6

1	WASTE MANAGEMENT	43	9784	17		3566	29		484.2	42			4879	46	NA	22.5
2	BROWNING-FERRIS INDUSTRIES	129	4264	2		2172	23		235.7	28			2337	16	14.4	21.7
3	CHEMICAL WASTE MANAGEMENT	205	2776	-2		700	25		116.9	35			876	45	NA	22.3
4	WHEELABRATOR TECHNOLOGIES	448	1161	47		1205	20		42.6	70			1192	38	6.2	8.4
5	ROLLINS ENVIRONMENTAL SERVICES	665	666	-40		198	7		27.1	-13			205	14	16.5	16.7
6	CHAMBERS DEVELOPMENT	785	529	37		137	33		19.5	100			301	31	10.1	20.5
7	CALGON CARBON	801	510	16		226	32		29.5	67			178	30	28.0	27.8

31D PRINTING & ADVERTISING

GROUP COMPOSITE 4773 10 5790 16 337.6 2 5645 9 18.2 17.0

1	R. R. DONNELLEY & SONS	196	2923	0		2878	16		205.3	-6			2346	5	14.9	15.8
2	INTERPUBLIC GROUP	548	883	13		1192	23		60.1	22			1310	18	20.3	20.0
3	OMNICO GROUP	824	488	-4		881	9		39.2	13			1135	9	16.7	19.5
4	OGILVY GROUP	836	479	16		838	13		33.0	11			854	8	19.8	18.0



Juvenile Diabetes only affects men, women and children.

Just because it's called 'juvenile diabetes' doesn't mean it's a child's disease. It can strike anyone. At any time. And when it does, it can bring along some very adult complications. Like heart attacks, strokes, kidney failure and blindness.

In spite of all this, things have never looked better. Because we know a cure is possible. We're the JDF and we fund diabetes research. Research that will change the outlook for juvenile diabetes. And for the men, women and children it affects.



JDF International. The Diabetes Research Foundation

432 Park Avenue South, New York, NY 10016 Tel: 1-800-JDF-CURE.



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %

TIE OTHER SERVICES

GROUP COMPOSITE		5642		-4	5887		27	386.3		35	9825		97	25.1	18.6
1	SERVICE CORP. INTERNATIONAL	550	874	-25	567	17	36.7	-39	1203	32	5.7	6.5			
2	KELLY SERVICES	576	828	-26	1269	9	60.3	20	326	25	27.6	27.6			
3	HANDLEMAN	675	648	54	630	20	39.8	25	345	11	NA	23.1			
4	SOOTHEY'S HOLDINGS	710	603	NA	349	25	62.7	60	351	NA	49.5	46.7			
5	NATIONAL EDUCATION	720	592	61	457	15	46.1	NM	423	20	17.5	25.0			
6	CINTAS	843	467	10	225	23	19.3	26	200	15	13.5	15.5			
7	ROLLINS	875	428	11	381	7	24.7	12	147	12	40.5	40.5			
8	KINDER CARE	876	426	-26	935	85	43.3	65	6087	189	22.4	11.0			
9	ARMOR ALL PRODUCTS	879	424	3	148	36	25.6	37	108	28	NA	29.3			
10	JWP	971	352	51	925	45	27.8	25	636	36	NA	20.0			

22

TELECOMMUNICATIONS

INDUSTRY COMPOSITE		193275	22	149149	9	9686.1	-21	270205	5	12.6	10.3
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22A EQUIPMENT & SERVICES

GROUP COMPOSITE		65929		36	50566		15	-1290.1	NM	59744		2	NM	-7.5
1	AMERICAN TELEPHONE & TELEGRAPH	4	34357	11	35210		4	-1669.0	NM	35152	-9		NM	-14.6
2	MCI COMMUNICATIONS	72	6413	94	5137		30	356.0	356	5584	6		NA	28.1
3	UNITED TELECOMMUNICATIONS	93	5426	81	6493		121	141.8	NM	9817	50		NA	9.0
4	McCAW CELLULAR COMMUNIS.	107	4907	104	311		58	-297.0	NM	2076	32		NM	NM
5	CONTEL CELLULAR	297	1888	NA	35		NA	2.6	NA	173	NA		1.0	2.0
6	CITIZENS UTILITIES	302	1842	33	300		9	74.2	16	1013	7		12.5	16.2
7	US WEST NEWVECTOR GROUP	339	1715	NA	133		32	-24.8	NM	307	26		NM	-14.5
8	METRO MOBILE CTS	379	1469	70	67		165	-40.5	NM	236	-6		NM	NM
9	CELLULAR COMMUNICATIONS	469	1109	133	52		79	-10.5	NM	278	26		NM	-9.5
10	TELEPHONE & DATA SYSTEMS	536	915	153	196		12	10.6	-7	563	18		5.2	5.1
11	U. S. CELLULAR	570	835	NA	15		NA	-7.7	NA	106	NA		NM	-9.0
12	MOBILE COMMUNICATIONS	574	830	33	110		25	-14.2	NM	338	13		NA	-6.9
13	PACIFIC TELECOM	608	758	39	552		5	58.4	31	1133	-5		NA	13.0
14	CENTURY TELEPHONE ENTERPRISES	629	713	146	184		17	23.4	0	498	5		NA	14.9
15	TELECOM-USA	682	633	167	524		32	27.3	82	360	30		24.5	47.1
16	VANGUARD CELLULAR SYSTEMS	761	556	166	23		110	-26.6	NM	142	154		NA	-52.7
17	COMMUNICATIONS SATELLITE	811	500	3	359		8	62.0	248	1163	5		7.5	11.4
18	ASSOCIATED COMMUNICATIONS	947	367	36	16		88	-7.9	NM	49	-8		NM	-28.4
19	DSC COMMUNICATIONS	964	356	13	340		28	20.0	3057	429	17		8.7	8.9
20	SCIENTIFIC-ATLANTA	989	340	-9	510		-1	31.8	12	329	9		12.8	12.7

22B TELEPHONE COMPANIES

GROUP COMPOSITE		127347		16	98584		6	10976.2		9	210462		6	17.5	14.4
1	BELLSOUTH	13	18850	-2	13597	11	1665.5	0	28472	4	11.4	14.1			
2	GTE	23	15172	21	16460	7	1224.7	9	31104	8	9.8	14.5			
3	BELL ATLANTIC	25	14727	5	10880	1	1316.8	6	24729	5	10.7	14.4			
4	PACIFIC TELESIS GROUP	26	14348	15	9483	4	1188.0	25	21191	-1	11.7	14.7			
5	AMERITECH	28	13796	8	9903	4	1237.4	4	19163	2	12.2	15.8			
6	NYNEX	29	13734	-1	12661	5	1315.0	3	25378	10	11.5	14.0			
7	SOUTHWESTERN BELL	31	13330	17	8453	6	1060.1	1	20985	-2	11.0	12.6			
8	US WEST	40	11096	12	9221	6	1131.7	13	22416	7	10.8	14.5			
9	CONTEL	148	3878	50	2964	9	311.6	262	5907	7	NA	20.2			

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
	10 CENTEL	219	2655	27	1095	2	109.8	-18	3753	37	9.4	11.9
	11 SOUTHERN NEW ENGLAND TEL.	276	2018	32	1583	6	155.4	11	3073	13	10.5	13.7
	12 ALLTEL	323	1766	72	1068	8	125.0	2	2153	0	11.2	15.7
	13 CINCINNATI BELL	403	1328	70	738	16	84.3	31	1253	10	NA	17.0
	14 ROCHESTER TELEPHONE	674	648	30	479	3	50.9	40	885	3	NA	15.4

23

TRANSPORTATION

INDUSTRY COMPOSITE 55140 -1 103906 14 3938.5 41 129518 1 8.5 10.0

23A AIRLINES

GROUP COMPOSITE 14561 2 50304 17 1001.3 23212 44054 2 6.5 8.9

1 AMR	159	3456	36	8824	23	476.8	140	9434	13	10.5	15.4
2 DELTA AIR LINES	206	2755	14	7323	15	344.5	48	5816	8	12.9	14.5
3 UAL	227	2574	-46	8982	8	599.9	NM	6593	-23	25.3	50.0
4 NWA	309	1824	42	5650	10	135.1	31	4372	2	6.9	8.4
5 USAIR GROUP	338	1722	10	5707	90	165.0	-15	5515	38	6.7	8.1
6 SOUTHWEST AIRLINES	606	762	39	860	11	58.0	188	1271	22	8.4	10.5
7 PAN AM	724	588	47	3569	17	-96.9	NM	2176	-7	NM	NM
8 TEXAS AIR	806	506	-9	8573	-1	-718.6	NM	8147	-6	NM	NM
9 ALASKA AIR GROUP	942	374	42	814	15	37.5	181	730	3	10.4	12.4

23B RAILROADS

GROUP COMPOSITE 26521 -5 31180 10 1890.5 3 59277 -3 8.4 9.4

1 UNION PACIFIC	53	7524	8	6068	13	558.7	13	12227	12	9.8	12.5
2 NORFOLK SOUTHERN	75	6252	10	4462	8	635.1	268	10059	3	NA	12.3
3 CSX	161	3414	-27	7592	9	-38.0	NM	13026	5	NM	-1.5
4 SANTA FE SOUTHERN PACIFIC	170	3306	26	3144	11	146.7	-39	6824	-22	10.8	30.4
5 CONSOLIDATED RAIL	244	2347	5	3490	7	306.0	15	7224	6	NA	7.7
6 BURLINGTON NORTHERN	321	1771	-67	4700	11	207.2	16	6330	-29	10.3	22.5
7 CNW	690	626	69	995	11	69.3	323	1727	1	10.9	12.8
8 FLORIDA EAST COAST INDUSTRIES	769	548	6	181	13	35.6	36	561	8	9.1	9.1
9 KANSAS CITY SOUTHERN INDUSTRIES	913	392	-12	507	0	-46.3	NM	917	0	-4.9	-14.1
10 CHICAGO MILWAUKEE	988	340	-5	42	-59	16.2	-48	382	-4	4.2	4.2

23C TRANSPORTATION SERVICES

GROUP COMPOSITE 7372 3 12038 15 488.5 -8 18040 12 12.3 11.5

1 FEDERAL EXPRESS	234	2495	9	4244	21	192.0	9	3145	13	10.7	13.7
2 RYDER SYSTEM	279	2008	-20	5030	9	134.6	-28	6039	5	7.4	8.6
3 FLIGHTSAFETY INTERNATIONAL	479	1070	18	183	34	50.0	20	438	18	17.4	19.1
4 INTERNATIONAL LEASE FINANCE	617	742	34	202	17	43.4	-9	1765	55	5.6	15.4
5 PHH	736	578	7	1792	22	21.4	-51	4048	6	NA	6.5
6 GATX	835	479	19	587	7	47.0	35	2605	18	8.6	NA

23D TRUCKING & SHIPPING

GROUP COMPOSITE 6686 8 10385 15 558.2 32 8147 8 14.4 14.6

1 ALEXANDER & BALDWIN	342	1687	33	665	5	135.1	12	1070	7	NA	22.6
2 ROADWAY SERVICES	442	1179	-11	2185	14	80.2	59	1193	8	NA	12.0
3 CONSOLIDATED FREIGHTWAYS	461	1127	-4	2689	17	113.2	52	1536	12	15.0	15.4
4 YELLOW FREIGHT SYSTEM	581	809	-9	2016	15	69.0	67	1021	10	13.3	16.9
5 OVERSEAS SHIPHOLDING GROUP	598	774	38	307	5	46.4	31	1316	4	6.6	6.8
6 AMERICAN PRESIDENT	698	620	-9	2131	17	81.3	3	1711	3	8.8	13.9
7 J. B. HUNT TRANSPORT SERVICES	823	489	19	393	37	33.0	47	300	20	17.9	23.2

24

UTILITIES

INDUSTRY COMPOSITE 182842 7 197373 5 18394.9 -11 524704 3 8.9 10.2

24A ELECTRIC & WATER

GROUP COMPOSITE 157210 6 155165 6 16944.9 -11 462060 3 8.3 10.5

1 SOUTHERN	54	7253	3	7235	1	965.8	38	22374	2	NA	12.7
2 PACIFIC GAS & ELECTRIC	58	7044	9	7646	6	62.1	-90	21847	2	NA	-0.5



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

RANK	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL.	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
3	COMMONWEALTH EDISON	61	6979	16	5613	-1	737.5	-32	20196	0	7.8	9.1
4	SEECORP	63	6936	1	6253	12	808.5	12	15781	10	10.3	15.0
5	CONSOLIDATED EDISON CO. OF N. Y.	99	5173	1	5109	0	599.3	9	9552	1	9.6	13.3
6	AMERICAN ELECTRIC POWER	101	5056	-9	4841	1	693.0	19	14262	2	10.3	15.0
7	PUBLIC SERVICE ENTERPRISE GROUP	109	4877	-2	4395	4	559.9	0	11690	8	9.8	13.5
8	TEXAS UTILITIES	112	4775	14	4154	2	737.6	-4	16058	15	9.5	11.4
9	DUKE POWER	121	4456	-4	3627	-2	448.1	-10	8891	4	8.9	11.5
10	PACIFICORP	131	4222	78	3519	7	446.7	9	11396	11	NA	23.1
11	PHILADELPHIA ELECTRIC	138	4028	6	3229	1	566.0	5	11863	6	9.9	13.0
12	DOMINION RESOURCES	139	4022	-3	3344	2	491.0	2	10282	4	9.6	13.6
13	FPL GROUP	149	3852	-1	5854	32	493.3	9	11793	5	10.2	13.7
14	MIDDLE SOUTH UTILITIES	160	3427	65	3565	3	498.0	11	15913	5	8.4	8.5
15	HOUSTON INDUSTRIES	174	3214	-14	3596	0	458.0	-4	10207	6	9.7	12.2
16	OHIO EDISON	185	3050	5	2143	20	229.9	-46	7774	-2	7.4	7.0
17	CAROLINA POWER & LIGHT	197	2893	2	2273	9	196.8	-44	7504	0	6.8	7.1
18	CENTRAL & SOUTH WEST	198	2854	-6	2512	3	356.0	-11	8110	3	10.4	12.5
19	PENNSYLVANIA POWER & LIGHT	221	2634	-2	2214	6	332.0	10	7525	1	9.3	13.7
20	DETROIT EDISON	228	2568	25	3102	9	-235.3	NM	10811	-1	2.0	-10.3
21	UNION ELECTRIC	239	2413	0	2029	4	291.6	-13	5827	-2	9.3	13.8
22	BALTIMORE GAS & ELECTRIC	247	2329	-5	1864	3	303.4	1	5126	7	10.1	14.5
23	CENTURION ENERGY	256	2236	-3	2038	6	-32.6	NM	12047	6	NM	-3.7
24	GENERAL PUBLIC UTILITIES	261	2161	7	2834	6	313.8	8	6415	2	10.0	14.0
25	SAN DIEGO GAS & ELECTRIC	271	2068	16	2076	9	189.4	6	3533	-1	9.9	14.4
26	NORTHEAST UTILITIES	273	2038	-8	2079	11	263.4	4	6765	2	7.9	12.2
27	CMS ENERGY	278	2016	37	2943	6	296.3	-8	8305	4	NA	17.1
28	NORTHERN STATES POWER	291	1923	-5	2006	13	214.8	5	4496	2	9.4	13.6
29	ALLEGHENY POWER SYSTEM	296	1890	-4	2170	10	223.6	-1	4323	1	9.4	13.6
30	POTOMAC ELECTRIC POWER	300	1854	-12	1350	1	211.1	1	4146	12	9.7	16.2
31	WISCONSIN ENERGY	333	1734	6	1541	13	189.1	8	2803	-6	10.4	14.9
32	FLORIDA PROGRESS	334	1731	-2	2002	2	196.6	-5	4304	4	11.0	13.7
33	NIAGARA MOHAWK POWER	350	1645	-7	2800	7	208.8	261	7076	4	7.0	8.5
34	LONG ISLAND LIGHTING	354	1598	62	2138	3	298.5	11	8317	-10	9.2	8.9
35	OKLAHOMA GAS & ELECTRIC	392	1375	2	1098	3	137.8	21	2521	3	10.4	15.2
36	NEW ENGLAND ELECTRIC SYSTEM	404	1318	6	1520	5	-43.2	NM	3718	-6	NA	-5.1
37	TECO ENERGY	415	1277	-2	1034	7	126.1	8	2315	2	10.7	14.6
38	ILLINOIS POWER	419	1267	-19	1285	5	155.4	-46	6053	2	6.0	6.2
39	NEW YORK STATE ELECTRIC & GAS	424	1262	3	1340	4	171.5	228	4693	5	9.7	13.5
40	CINCINNATI GAS & ELECTRIC	427	1256	7	1386	2	226.9	99	3361	9	12.3	18.0
41	PINNACLE WEST CAPITAL	429	1237	-48	1442	9	4.2	-98	13100	-13	1.0	0.2
42	SCANA	440	1197	-5	1083	-3	128.8	-8	2887	6	9.9	13.4
43	TUCSON ELECTRIC POWER	454	1150	-17	543	15	128.9	2	2061	4	10.4	15.5
44	SOUTHWESTERN PUBLIC SERVICE	477	1074	3	791	2	104.9	1	1661	1	10.8	15.6
45	PUBLIC SERVICE CO. OF COLORADO	480	1069	-6	1685	2	125.0	-13	2984	2	9.7	12.0
46	DUQUESNE LIGHT	484	1059	-1	1063	20	137.4	11	3877	-7	NA	10.7
47	DPL	492	1030	-4	989	5	135.7	34	2556	5	9.6	14.7
48	PUGET SOUND POWER & LIGHT	495	1020	-2	791	9	128.2	6	2497	2	9.4	13.2
49	PORTLAND GENERAL	502	1003	-5	762	0	109.4	14	2437	-8	8.9	11.3
50	WPPSCO INDUSTRIES	505	990	23	1524	5	122.9	89	3685	-4	8.3	10.1
51	GULF STATES UTILITIES	535	918	51	1520	6	103.1	-57	6858	1	6.3	1.9
52	KANSAS CITY POWER & LIGHT	549	882	7	737	5	105.7	2	2647	0	8.9	12.2

COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL	CHANGE FROM 1988 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	12 MONTHS 1988 \$ MIL	CHANGE FROM 1987 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
53 MONTANA POWER	562	853	5	444	5	71.9	15	1926	3	7.9	8.8
54 IPALCO ENTERPRISES	577	821	-4	609	10	105.8	10	1752	1	10.8	14.6
55 DELMARVA POWER & LIGHT	584	802	-1	768	8	84.7	6	1915	6	9.2	12.7
56 IDAHO POWER	597	777	-5	412	5	49.1	2	1609	0	7.8	7.8
57 KANSAS POWER & LIGHT	604	765	-10	1166	0	79.8	-10	1777	3	9.5	12.9
58 PSI HOLDINGS	621	729	3	1043	-3	116.6	-20	2129	-4	13.8	21.0
59 CENTRAL ILLINOIS PUBLIC SERVICE	639	701	-7	616	4	86.2	23	1678	1	9.5	13.5
60 KENTUCKY UTILITIES	644	695	-4	560	1	79.3	8	1351	3	10.6	14.9
61 MINNESOTA POWER & LIGHT	649	687	5	460	8	72.9	4	1484	7	10.6	13.9
62 LOUISVILLE GAS & ELECTRIC	651	685	1	660	5	85.0	12	1763	6	9.1	13.1
63 KANSAS GAS & ELECTRIC	656	674	-13	526	2	77.2	7	2443	-5	NA	10.9
64 ATLANTIC ENERGY	672	656	6	676	4	78.1	0	1660	11	9.7	13.3
65 HAWAIIAN ELECTRIC INDUSTRIES	688	628	13	733	15	59.7	40	2572	103	11.0	12.4
66 BOSTON EDISON	696	621	-2	1203	2	84.2	-3	2817	4	8.2	9.6
67 WASHINGTON WATER POWER	716	597	4	542	36	71.4	5	1378	-3	8.8	12.1
68 WPL HOLDINGS	717	597	-3	601	9	61.7	5	1026	-10	10.3	13.9
69 AMERICAN WATER WORKS	751	564	10	512	6	56.9	2	1737	8	8.7	12.1
70 ROCHESTER GAS & ELECTRIC	774	543	5	774	6	76.1	213	1823	2	8.8	12.6
71 NEVADA POWER	775	540	0	409	9	50.2	-10	1014	8	8.8	12.5
72 SIERRA PACIFIC RESOURCES	792	520	7	408	13	45.3	6	1244	9	8.3	11.3
73 IOWA-ILLINOIS GAS & ELECTRIC	799	512	-6	496	4	58.4	5	1242	5	8.6	13.4
74 WISCONSIN PUBLIC SERVICE	826	487	-7	604	4	56.4	7	993	4	10.6	14.2
75 PUBLIC SERVICE CO. OF NEW MEXICO	845	465	-38	792	1	85.0	-39	2567	-5	7.7	7.7
76 EL PASO ELECTRIC	862	443	-15	384	14	29.6	-27	2043	-8	NA	3.0
77 CILCORP	870	432	0	471	4	49.3	27	1096	2	9.3	13.4
78 EASTERN UTILITIES ASSOCIATES	893	411	28	374	2	40.4	-15	1209	13	11.5	12.4
79 MIDWEST ENERGY	908	394	-5	570	6	43.9	17	1092	1	9.9	14.7
80 CENTRAL MAINE POWER	909	394	1	654	4	45.8	-1	1211	10	NA	11.7
81 IOWA RESOURCES	914	392	-17	348	2	33.8	-19	1198	4	7.1	9.4
82 MAGMA POWER	934	376	60	26	34	9.3	132	229	57	6.6	7.5
83 UTILICORP UNITED	935	376	16	673	13	40.9	23	1005	7	10.4	12.1
84 CENTRAL LOUISIANA ELECTRIC	962	356	-2	301	-1	43.1	-4	890	3	10.3	13.7
85 ORANGE & ROCKLAND UTILITIES	968	355	-8	487	8	44.6	7	922	5	10.0	13.6
86 SOUTHERN INDIANA GAS & ELECTRIC	974	351	9	313	13	38.2	15	699	6	10.5	15.4
87 UNITED ILLUMINATING	984	344	22	519	4	78.6	809	2365	9	10.9	14.2
88 MDU RESOURCES GROUP	985	342	0	344	6	34.9	25	977	2	8.2	12.1

24B GAS & TRANSMISSION

GROUP COMPOSITE	25632	13	42208	1	1450.1	-4	62645	3	9.5	7.7	
1 CONSOLIDATED NATURAL GAS	180	3142	-2	2468	6	192.9	4	3851	3	11.3	12.0
2 TEXAS EASTERN	214	2676	70	3481	-4	166.9	74	4869	0	8.2	12.4
3 PACIFIC ENTERPRISES	232	2530	-14	5932	10	229.3	-1	6866	34	NA	11.8
4 ARKLA	314	1804	9	1996	4	124.8	8	3040	29	NA	16.7
5 ENRON	319	1783	4	5708	-4	130.2	143	8700	-7	NA	6.8
6 COLUMBIA GAS SYSTEM	353	1600	23	3129	12	119.0	7	5641	4	8.0	7.3
7 SONAT	430	1229	8	1392	-2	84.7	8	3138	-1	6.7	7.7
8 PANHANDLE EASTERN	439	1199	-14	1262	-19	-171.9	NM	2973	-2	NA	-20.6
9 WILLIAMS	441	1193	17	1673	-6	-4.9	NM	3567	4	-4.8	-0.4
10 TRANSCO ENERGY	463	1119	34	2774	-12	-27.2	NM	3527	-13	1.4	-8.9
11 ENSERCH	465	1117	6	2739	7	10.7	-83	2970	-11	NA	-0.7
12 NICOR	538	908	7	1509	5	106.1	27	2100	6	12.6	17.2
13 EQUITABLE RESOURCES	637	702	2	406	0	47.1	36	1011	7	8.8	10.2
14 PEOPLES ENERGY	664	668	17	1134	1	82.6	44	1508	2	11.1	15.9
15 QUESTAR	707	608	-7	486	-1	24.6	0	1026	-2	6.1	5.4
16 BROOKLYN UNION GAS	747	565	5	928	2	67.1	13	1348	10	9.7	13.3
17 EASTERN GAS & FUEL ASSOCIATES	749	565	-2	672	-1	50.7	7	1041	6	9.5	10.9
18 ATLANTA GAS LIGHT	794	518	12	973	-6	43.7	-15	1322	26	8.7	11.1
19 NATIONAL FUEL GAS	838	478	-5	798	9	47.0	27	1291	9	10.8	11.2
20 WASHINGTON GAS LIGHT	842	473	23	698	2	45.1	14	923	12	9.0	11.4
21 DIVERSIFIED ENERGIES	910	393	-10	769	17	32.3	14	819	3	9.7	12.0
22 MCN	952	363	NA	1281	3	47.7	2	1281	4	12.8	19.3

*Business Week
and the Foreign Policy Association present*

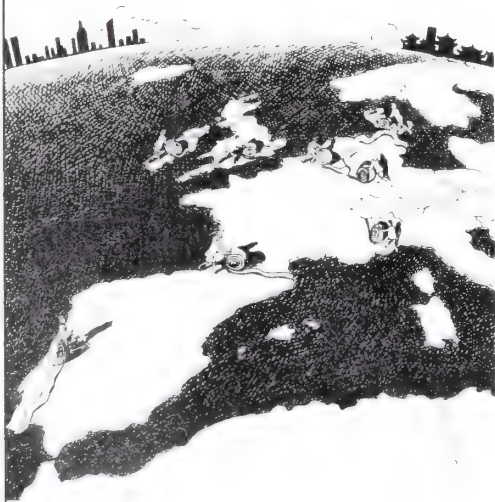
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THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE AMONG THE BUSINESS WEEK 1000 THAT LIST BEGINS ON PAGE 166. THE NUMBERS IMMEDIATELY TO THE RIGHT IDENTIFY THE COMPANY'S RANK IN SALES, PROFITS, AND ASSETS, RESPECTIVELY, AMONG ALL BUSINESS WEEK 1000 COMPANIES. THE NUMBER IN THE FAR RIGHT COLUMN IDENTIFIES THE COMPANY'S INDUSTRY CODE FOR REFERENCE TO THE SPECIAL INDUSTRIES SECTION BEGINNING ON PAGE 223

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
	A																
857	AAR	855	861	891	21	108	ALLIED-SIGNAL	48	103	149	5	751	AMER. WATER WORKS	779	602	508	24
	1111 Nicholas Blvd, Elk Grove Vil, IL 60007/312-439-3939						Columbia & Park Ave, Morristown, NJ 07962/201-455-2000						1025 Laurel Oak Rd, Voorhees, NJ 08043/609-346-8200				
38	ABBOTT LABS.	162	56	279	12	323	ALLTEL	561	357	448	22	28	AMERITECH	68	20	83	22
	Abbott Park-Rt 43 & 137, N. Chicago, IL 60064/312-937-6100						100 Executive Pkwy, Hudson, OH 44236/216-650-7000						30 South Wacker Dr, Chicago, IL 60606/312-750-5000				
694	ACUSON	952	822	982	12	599	ALZA	983	896	935	12	560	AMERITRUST	569	414	139	3
	1220 Charleston Rd, Mtn View, CA 94043/415-969-9112						950 Page Mill Rd, Palo Alto, CA 94303/415-494-5000						900 Euclid Ave, Cleveland, OH 44101/216-737-5000				
865	ADOBE SYSTEMS	984	869	998	18	272	AMAX	203	58	317	16	732	AMES DEPT. STORES	355	701	406	8
	1585 Charleston Rd, Mtn View, CA 94039/415-961-4400						55 Railroad Ave, Greenwich, CT 06836/203-629-6000						2418 Main St, Rocky Hill, CT 06067/203-563-8234				
669	ADVANCED MICRO	547	887	632	9	520	AMAX GOLD	976	799	976	16	739	AMETEK	774	752	809	9
	901 Thompson Pl, Sunnyvale, CA 94088/408-732-2400						1707 Cole Blvd, Golden, CO 80401/303-231-0444						410 Park Ave, New York, NY 10022/212-935-8640				
87	AETNA LIFE	16	65	12	17	313	AMDAHL	414	238	476	18	633	AMGEN	985	936	953	12
	151 Farmington Ave, Hartford, CT 06156/203-273-0123						1250 East Arques Ave, Sunnyvale, CA 94088/408-746-6000						1900 Oak Terrace, Thousand Oaks, CA 91320/805-499-5725				
201	AFFILIATED PUBS.	765	984	852	20	193	AMERADA HESS	186	362	274	11	10	AMOCO	18	9	44	11
	135 Morrissey Blvd, Boston, MA 02107/617-929-3300						1185 Ave of the Americas, NY, NY 10036/212-997-8500						200 East Randolph Dr, Chicago, IL 60601/312-856-6111				
346	AHMANSON (N. F.)	230	252	30	17	77	AMERICAN BRANDS	47	83	184	6	115	AMP	302	162	430	9
	135 North Grand Ave, Los Angeles, CA 90012/213-972-7401						1700 East Putnam, Old Greenwich, CT 06870/203-698-5000						470 Friendship Rd, Harrisburg, PA 17111/717-564-0100				
248	AIR PRODUCTS	316	236	369	4	106	AMERICAN CYANAMID	175	173	292	4	159	AMR	84	98	160	23
	7201 Hamilton Blvd, Allentown, PA 18195/215-481-4911						One Cyanamid Plaza, Wayne, NJ 07470/201-831-2000						4200 American Blvd, Fort Worth, TX 76155/817-963-1234				
942	ALASKA AIR GROUP	646	735	736	23	101	AMERICAN ELECTRIC	166	63	105	24	726	AMSOUTH BANCORP.	653	495	176	3
	19300 Pacific Hwy South, Seattle, WA 98188/206-431-7040						One Riverside Plaza, Columbus, OH 43215/614-223-1000						1900 Fifth Ave North, Birmingham, AL 35203/205-326-5120				
882	ALBANY INTL.	805	744	829	15	35	AMERICAN EXPRESS	17	36	4	17	401	ANADARKO PETROL.	884	715	549	11
	One Sage Rd, Menands, NY 12204/518-445-2200						Tower C World Fnci Ctr, New York, NY 10285/212-640-2000						16855 Northchase Dr, Houston, TX 77060/713-875-1101				
861	ALBERTO-CULVER	715	832	898	6	412	AMERICAN FAMILY	333	399	229	17	815	ANALOG DEVICES	814	703	838	9
	2525 Armitage Ave, Melrose Park, IL 60160/312-450-3000						1932 Wynnton Rd, Columbus, GA 31999/404-323-3431						Two Technology Way, Norwood, MA 02062/617-329-4700				
224	ALBERTSON'S	116	290	534	10	133	AMERICAN GENERAL	209	120	43	17	44	ANHEUSER-BUSCH	83	62	202	6
	250 Parkcenter Blvd, Boise, ID 83726/208-385-6200						2929 Allen Pkwy, Houston, TX 77019/713-522-1111						One Busch Place, St. Louis, MO 63118/314-577-2000				
493	ALCO STANDARD	207	422	541	5	624	AMERICAN GREETINGS	520	792	610	14	311	AON	296	251	178	17
	825 Duportail Rd, Wayne, PA 19087/215-296-8000						10500 American Rd, Cleveland, OH 44144/216-252-7300						123 North Wacker Dr, Chicago, IL 60606/312-701-3000				
95	ALCOA	71	41	141	16	37	AMERICAN HOME	147	39	291	12	127	APPLE COMPUTER	180	119	441	18
	1501 Alcoa Bldg, Pittsburgh, PA 15219/412-553-4545						685 Third Ave, New York, NY 10017/212-878-5000						20525 Mariani Ave, Cupertino, CA 95014/408-996-1010				
511	ALEXANDER & ALEXANDER	521	529	409	17	34	AMERICAN INTL.	39	25	33	17	869	APPLIED BIOSYSTEMS	958	891	971	9
	1211 Ave of the Americas, NY, NY 10036/212-840-8500						70 Pine St, New York, NY 10270/212-770-7000						850 Lincoln Centre Dr, Foster City, CA 94404/415-570-6667				
342	ALEXANDER & BALDWIN	703	334	637	23	436	AMERICAN MEDICAL	266	509	361	12	912	APPLIED MATERIALS	841	652	886	15
	822 Bishop St, Honolulu, HI 96813/808-525-6611						414 North Camden, Beverly Hills, CA 90210/213-278-6200						3050 Bowers Ave, Santa Clara, CA 95054/408-727-5555				
779	ALLEGHANY	584	665	527	17	500	AMERICAN NATL. INS.	607	440	308	17	136	ARCHER-DANIELS	103	140	280	10
	55 East 52nd St, New York, NY 10055/212-752-1356						One Moody Plaza, Galveston, TX 77550/409-763-4661						4666 Faries Pkwy, Decatur, IL 62526/217-424-5200				
556	ALLEGHENY LUDLUM	527	401	741	16	510	AMERICAN PETROFINA	305	340	515	11	199	ARCO CHEMICAL	297	92	416	4
	1000 Six PPG Pl, Pittsburgh, PA 15222/412-394-2800						8350 N. Central Exp, Dallas, TX 75206/214-750-2400						3801 West Chester, Newtown Sq, PA 19073/215-359-2000				
296	ALLEGHENY POWER	352	234	305	24	698	AMERICAN PRESIDENT	360	492	514	23	546	ARISTECH CHEMICAL	562	287	754	4
	320 Park Ave, New York, NY 10022/212-752-2121						1800 Harrison St, Oakland, CA 94612/415-272-8000						600 Grant St, Pittsburgh, PA 15219/412-433-2747				
						343	AMERICAN STORES	24	428	201	10	314	ARKLA	385	359	376	24
							5201 Am. Earhart, Salt Lake City, UT 84116/801-539-0112						400 East Capitol Ave, Little Rock, AR 72201/501-377-4659				
						125	AMERICAN TV	647	533	544	20	537	ARMCO	247	344	401	16
							300 First Stamford Pl, Stamford, CT 06902/203-328-0600						300 Interpace Pkwy, Parsippany, NJ 07054/201-316-5200				



ALPHABETICAL LIST OF COMPANIES

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE
AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
879	ARMOR ALL 22 Corporate Park, Irvine, CA 92714/714-553-1003	959	833	989	21	351	BANK OF N. ENGLAND 28 State St. Boston, MA 02109/617-742-4000	249	191	38	3	381	BLOCK (H&R) 4410 Main St. Kansas City, MO 64111/816-753-6900	638	454	824	17
352	ARMSTRONG WORLD West Liberty St, Lancaster, PA 17604/717-397-0611	301	289	517	6	376	BANK OF NEW YORK 48 Wall St, New York, NY 10286/212-495-1784	306	239	25	3	697	BLOCKBUSTER ENT. 901 E. Las Olas, Ft Lauderdale, FL 33301/305-524-8200	964	905	983	14
878	ARVIN INDUSTRIES 1531 13th St, Columbus, IN 47201/812-379-3000	499	900	641	2	938	BANK SOUTH 55 Marietta St N.W., Atlanta, GA 30303/404-529-4111	793	685	276	3	470	BOATMEN'S BANC. 100 North Broadway, St. Louis, MO 63102/314-425-7500	485	536	102	3
460	ASARCO 180 Maiden Lane, New York, NY 10038/212-510-2000	386	246	444	16	135	BANKAMERICA 555 California St, San Francisco, CA 94104/415-622-3456	64	82	8	3	854	BOB EVANS FARMS 3776 South High St, Columbus, OH 43207/614-491-2225	830	790	943	14
243	ASHLAND OIL 1000 Ashland Dr, Russell, KY 41169/606-329-3333	97	213	306	11	169	BANKERS TRUST 280 Park Ave, New York, NY 10017/212-250-2500	130	68	21	3	41	BOEING 7755 E. Marginal Way S., Seattle, WA 98108/206-655-2121	29	73	113	1
830	ASHTON-TATE 20101 Hamilton Ave, Torrance, CA 90502/213-329-8000	900	653	912	18	459	BARD (C. R.) 731 Central Ave, Murray Hill, NJ 07974/201-277-8000	665	499	806	12	295	BOISE CASCADE One Jefferson Square, Boise, ID 83728/208-384-6161	194	183	340	19
947	ASSOCIATED COMMS. 200 Gateway Towers, Pittsburgh, PA 15222/412-281-1907	997	950	999	22	285	BARNETT BANKS 100 Laura St, Jacksonville, FL 32202/904-791-7720	309	231	55	3	816	BOLAR PHARM. 33 Ralph Ave, Copiague, NY 11726/516-842-8383	967	793	980	12
4	AT&T 550 Madison Ave, New York, NY 10022/212-605-5500	9	1000	35	22	487	BATTLE MTN. GOLD 333 Clay St, Houston, TX 77002/713-650-6400	961	587	954	16	130	BORDEN 277 Park Ave, New York, NY 10172/212-573-4000	108	167	300	10
992	ATARI 1196 Borregas Ave, Sunnyvale, CA 94088/408-745-2000	813	718	834	18	391	BAUSCH & LOMB One Lincoln First Square, Rochester, NY 14604/716-338-6000	593	430	597	6	696	BOSTON EDISON 800 Boylston St, Boston, MA 02199/617-424-2000	529	480	398	24
794	ATLANTA GAS LIGHT 235 Peachtree St, Atlanta, GA 30303/404-584-4000	594	684	582	24	113	BAXTER INTL. One Baxter Pkwy, Deerfield, IL 60015/312-948-2000	113	129	170	12	507	BOWATER One Parklands Dr, Darien, CT 06820/203-656-7200	474	288	496	19
672	ATLANTIC ENERGY 1199 Black Horse, Pleasantville, NJ 08232/609-645-4500	698	502	520	24	660	BAYBANKS 175 Federal St, Boston, MA 02110/617-482-1040	613	458	159	3	911	BRIGGS & STRATTON 12301 West Wirth St, Wauwatosa, WI 53222/414-259-5333	617	910	775	15
19	ATLANTIC RICHFIELD 515 South Flower St, Los Angeles, CA 90071/213-486-3511	25	14	73	11	422	BEAR STEARNS 245 Park Ave, New York, NY 10167/212-272-2000	401	313	32	17	30	BRISTOL-MYERS 345 Park Ave, New York, NY 10154/212-546-4000	124	44	262	12
643	AUTODESK 2320 Marinship Way, Sausalito, CA 94965/415-331-0356	971	776	969	18	280	BECTON, DICKINSON One Becton Dr, Franklin Lakes, NJ 07417/201-848-6800	410	300	447	12	747	BROOKLYN UNION 195 Montague St, Brooklyn, NY 11201/718-403-2000	609	554	575	24
216	AUTOMATIC DATA One ADP Blvd, Roseland, NJ 07068/201-994-5000	438	273	536	18	25	BELL ATLANTIC 1600 Market St, Philadelphia, PA 19103/215-963-6000	52	17	60	22	740	BROWN GROUP 8400 Maryland Ave, St. Louis, MO 63105/314-854-4000	427	797	723	6
501	AVERY INTL. 150 N. Orange Grove Bl, Pasadena, CA 91103/818-304-2000	448	503	620	15	13	BELLSOUTH 1155 Peachtree St N.E., Atlanta, GA 30367/404-249-2000	37	13	50	22	325	BROWN-FORMAN 850 Dixie Highway, Louisville, KY 40210/502-585-1100	570	320	658	6
595	AVNET 80 Cutter Mill Rd, Great Neck, NY 11021/516-466-7000	393	633	628	21	812	BELO (A. H.) 508 Young St, Dallas, TX 75202/214-977-6600	852	917	738	20	129	BROWNING-FERRIS 757 North Eldridge, Houston, TX 77079/713-870-8100	351	216	435	21
328	AVON PRODUCTS 9 West 57th St, New York, NY 10019/212-546-6015	259	371	422	6	678	BEMIS 625 Marquette Ave, Minneapolis, MN 55402/612-340-6000	560	716	783	7	539	BRUNO'S 300 Research Pky, Birmingham, AL 35211/205-940-9400	372	676	772	10
B						498	BENEFICIAL Route 206, Peapack, NJ 07977/201-781-3000	473	411	197	17	369	BRUNSWICK One Brunswick Plaza, Skokie, IL 60077/312-470-4700	243	259	458	14
284	BAKER HUGHES 3900 Essex Lane, Houston, TX 77027/713-439-8600	330	598	456	11	829	BERGEN BRUNSWIG 4000 Metropolitan Dr, Orange, CA 92668/714-385-4000	219	734	646	12	810	BRUSH WELLMAN 1200 Hanna Bldg, Cleveland, OH 44115/216-443-1000	876	777	873	16
691	BALL 345 South High St, Muncie, IN 47305/317-747-6100	559	775	697	7	930	BERKLEY (W. R.) 165 Mason St, Greenwich, CT 06836/203-629-2880	766	590	603	17	321	BURLINGTON NORTH. 999 Third Ave, Seattle, WA 98104/206-467-3838	174	247	223	23
713	BALLY MFG. 8700 West Bryn Mawr, Chicago, IL 60631/312-399-1300	392	731	399	14	85	BERKSHIRE HATHAWAY 1440 Kiewit Plaza, Omaha, NE 68131/402-346-1400	376	189	225	17	67	BURLINGTON RES. 999 Third Ave, Seattle, WA 98104/206-467-3838	354	539	249	11
247	BALTIMORE G&E Charles Center, Baltimore, MD 21203/301-234-5000	404	174	268	24	304	BETHLEHEM STEEL Eighth & Eaton Aves, Bethlehem, PA 18018/215-694-2424	148	126	297	16	C					
173	BANC ONE 100 East Broad St, Columbus, OH 43271/614-248-5800	295	155	58	3	612	BETZ LABORATORIES 4636 Somerton Rd, Trevose, PA 19047/215-355-3300	817	648	901	4	558	CABLEVISION One Media Crossways, Woodbury, NY 11797/516-364-8450	788	990	611	20
918	BANCO POPULAR P. O. Box 2708, San Juan, PR 00936/809-751-9800	751	655	243	3	844	BEVERLY ENTS. 99 South Oakland Ave, Pasadena, CA 91101/818-577-6111	377	962	487	12	443	CABOT 950 Winter St, Waltham, MA 02254/617-890-0200	421	551	523	4
704	BANCORP HAWAII 111 South King St, Honolulu, HI 96813/808-537-8111	718	516	218	3	987	BIG BEAR 770 Goodale Blvd, Columbus, OH 43212/614-464-6500	602	906	934	10	969	CAESARS NEW JERSEY 1801 Century Park E., Los Angeles, CA 90067/213-552-2711	879	751	926	14
504	BANDAG Bandag Center, Muscatine, IA 52761/319-262-1400	789	537	905	2	809	BIOMET Airport Industrial Park, Warsaw, IN 46580/219-267-6639	970	895	990	12	618	CAESARS WORLD 1801 Century Park E., Los Angeles, CA 90067/213-552-2711	636	562	704	14
336	BANK OF BOSTON 100 Federal St, Boston, MA 02110/617-434-2200	153	159	34	3	393	BLACK & DECKER 701 East Joppa Rd, Towson, MD 21204/301-583-3900	327	412	477	15	738	CALFED 5670 Wilshire Blvd, Los Angeles, CA 90036/213-932-4321	283	337	52	17
						771	BLOCK DRUG 257 Cornelison Ave, Jersey City, NJ 07302/201-434-3000	846	694	862	6						

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ALPHABETICAL LIST OF COMPANIES

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MKT RANK	COMPANY	OTHER RANKINGS			IND NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
801	CALGON CARBON 400 Media Dr. Robinson Twp., PA 15205/412-787-6700	928	801	962	21	192	CHAMPION INTL. One Champion Plaza, Stamford, CT 06921/203-358-7000	157	105	215	19	701	CITY NATIONAL 400 N. Roxbury, Beverly Hills, CA 90210/213-550-5400	863	641	309	3
544	CALMAT 3200 San Fernando, Los Angeles, CA 90065/213-258-2777	708	605	725	13	631	CHAMPION SPARK 900 Upton Ave., Toledo, OH 43607/419-535-2567	676	864	798	2	727	CLARK EQUIPMENT 100 North Michigan St., South Bend, IN 46634/219-239-0100	508	680	679	15
648	CAMERON IRON 13013 Northwest Fwy., Houston, TX 77040/713-939-2211	750	932	727	11	941	CHAPARRAL STEEL 300 Ward Rd., Midlothian, TX 76065/214-775-8241	836	670	876	16	335	CLOROX 1221 Broadway, Oakland, CA 94612/415-271-7000	490	324	613	6
141	CAMPBELL SOUP Campbell Place, Camden, NJ 08103/609-342-4800	154	202	316	10	572	CHARMING SHOPPES 450 Winks Lane, Bensalem, PA 19020/215-245-9100	683	727	868	8	278	CMS ENERGY 300 Towncenter Dr., Dearborn, MI 48126/313-436-9200	271	178	177	24
64	CAPITAL CITIES/ABC 77 West 66th St., New York, NY 10023/212-456-7777	169	131	236	20	183	CHASE MANHATTAN One Chase Manhattan Plaza, NY, NY 10081/212-552-2222	43	31	7	3	155	CNA FINANCIAL 333 South Wabash, Chicago, IL 60685/312-822-5000	94	122	65	17
371	CAPITAL HOLDING 680 Fourth Ave., Louisville, KY 40202/502-560-2000	373	263	111	17	995	CHEMED 1200 Dubois Tower, Cincinnati, OH 45202/513-762-6900	784	872	896	6	690	CNW One North Western Center, Chicago, IL 60606/312-559-7000	588	541	509	23
197	CAROLINA POWER 411 Fayetteville St., Raleigh, NC 27602/919-546-6111	339	255	195	24	286	CHEMICAL BANKING 277 Park Ave., New York, NY 10172/212-310-6161	101	55	17	3	307	COASTAL Nine Greenway Plaza, Houston, TX 77046/713-877-1400	93	299	191	11
860	CARPENTER TECH. 101 West Bern St., Reading, PA 19612/215-371-2000	734	773	765	16	205	CHEMICAL WASTE 3001 Butterfield Rd., Oak Brook, IL 60521/312-218-1500	692	379	698	21	16	COCA-COLA One Coca-Cola Plaza N.W., Atlanta, GA 30313/404-676-2121	89	33	196	6
708	CARTER-WALLACE 767 Fifth Ave., New York, NY 10153/212-758-4500	777	683	840	12	856	CHESAPEAKE 1021 East Cary St., Richmond, VA 23218/804-697-1000	691	628	761	19	264	COCA-COLA ENTS. One Coca-Cola Plaza N.W., Atlanta, GA 30313/404-676-2100	206	306	290	6
362	CASTLE & COOKE 10900 Wilshire Blvd., Los Angeles, CA 90024/213-824-1500	319	388	489	10	14	CHEVRON 225 Bush St., San Francisco, CA 94104/415-894-7700	14	11	36	11	832	COLEMAN 250 North St. Francis Ave., Wichita, KS 67202/316-261-3211	710	847	847	14
83	CATERPILLAR 100 N.E. Adams St., Peoria, IL 61629/309-675-1000	61	72	154	15	988	CHICAGO MILWAUKEE 547 West Jackson Blvd., Chicago, IL 60606/312-822-0400	991	902	865	23	177	COLGATE-PALMOLIVE 300 Park Ave., New York, NY 10022/212-310-2000	171	305	357	6
783	CBI INDUSTRIES 800 Jorie Blvd., Oak Brook, IL 60522/312-572-7000	486	821	576	11	625	CHRIS-CRAFT INDS. 600 Madison Ave., New York, NY 10022/212-421-0200	920	866	699	20	901	COLLINS FOODS INTL. 12655 W. Jefferson, Los Angeles, CA 90066/213-827-2300	770	811	866	14
140	CBS 51 West 52nd St., New York, NY 10019/212-975-4321	287	190	294	20	81	CHRYSLER 12000 Chrysler Dr., Highland Park, MI 48288/313-956-5741	8	32	24	2	353	COLUMBIA GAS 20 Montchanin Rd., Wilmington, DE 19807/302-429-5000	253	375	247	24
953	CB&T BANKSHARES 901 Front Ave., Columbus, GA 31901/404-649-2311	921	828	473	3	217	CHUBB 15 Mountain View Rd., Warren, NJ 07060/201-580-2000	202	137	153	17	294	COLUMBIA PICTURES 711 Fifth Ave., New York, NY 10022/212-751-4400	542	924	345	14
469	CELLULAR COMMUNS. 150 East 58th St., New York, NY 10155/212-319-7014	990	954	920	22	950	CHURCH'S FRIED 355 Spencer Lane, San Antonio, TX 78201/512-735-9392	827	956	895	14	486	COMBUSTION ENG. 900 Long Ridge Rd., Stamford, CT 06902/203-329-8771	233	994	417	21
219	CENTEL 8725 Higgins Rd., Chicago, IL 60631/312-399-2500	554	394	332	22	134	CIGNA 1600 Arch St., Philadelphia, PA 19103/215-523-4000	27	121	22	17	410	COMCAST One Belmont Ave., Bala-Cynwyd, PA 19004/215-667-4200	832	958	531	20
452	CENTEL CABLE 2001 Spring Rd., Oak Brook, IL 60521/312-954-4800	956	921	800	20	870	CILCORP 300 Liberty St., Peoria, IL 61602/309-672-5271	809	642	629	24	521	COMDISCO 6111 North River Rd., Rosemont, IL 60018/312-698-3000	489	451	336	18
256	CENTERIOR ENERGY 6200 Oak Tree Blvd., Independence, OH 44131/216-447-3100	374	968	122	24	403	CINCINNATI BELL 201 East Fourth St., Cincinnati, OH 45202/513-397-9900	675	478	591	22	619	COMERICA 211 West Fort St., Detroit, MI 48275/313-222-5585	573	389	134	3
895	CENTEX 3333 Lee Pkwy., Dallas, TX 75219/214-559-6500	424	782	643	13	509	CINCINNATI FNCL. 6200 South Gilmore Rd., Fairfield, OH 45014/513-874-2000	616	360	453	17	890	COMMERCE BANC. 1000 Walnut, Kansas City, MO 64106/816-234-2000	797	645	252	3
872	CENTRAL FIDELITY 1021 East Cary St., Richmond, VA 23219/804-782-4000	818	638	286	3	427	CINCINNATI G&E 139 East Fourth St., Cincinnati, OH 45202/513-381-2000	483	230	356	24	523	COMMERCE CLEARING 2700 Lake Cook Rd., Riverwoods, IL 60015/312-940-4600	722	639	819	20
639	CENTRAL ILLINOIS PS 607 East Adams St., Springfield, IL 62739/217-523-3600	726	466	518	24	756	CINCINNATI MIL. 4701 Marburg Ave., Cincinnati, OH 45209/513-841-8100	635	838	740	15	778	COMMODORE INTL. 1200 Wilson Dr., West Chester, PA 19380/215-431-9100	597	544	753	18
962	CENT. LA. ELECTRIC 2030 Donahue Ferry Rd., Pineville, LA 71360/318-484-7400	903	690	692	24	843	CINTAS 11255 Reed Hartman, Cincinnati, OH 45241/513-489-4000	930	888	950	21	61	COMMON. EDISON 72 West Adams, Chicago, IL 60603/312-294-4321	141	60	81	24
909	CENT. MAINE POWER Edison Dr., Augusta, ME 04336/207-623-3521	712	666	596	24	657	CIRCLE K 1601 North Seventh St., Phoenix, AZ 85006/602-253-9600	245	624	498	10	811	COMMUNS. SATELLITE 950 L'Enfant Pl S.W., Washington, DC 20024/202-863-6000	869	572	612	22
198	CENT. & SOUTH WEST 2121 San Jacinto St., Dallas, TX 75201/214-754-1000	315	144	182	24	514	CIRCUIT CITY STORES 2040 Thalbro St., Richmond, VA 23230/804-257-4292	437	566	752	6	432	COMMUNITY PSYCH. 24502 Pacific Pk., Laguna Hills, CA 92656/714-831-1166	874	530	827	12
583	CENTURY COMMUNS. 50 Locust Ave., New Canaan, CT 06840/203-966-8746	950	952	710	20	475	CIRCUS CIRCUS 2880 L. Vegas Bl S., Las Vegas, NV 89109/702-734-0410	778	523	807	14	215	COMPAQ COMPUTER 20555 State Hwy 249, Houston, TX 77070/713-370-0670	371	203	537	18
629	CENTURY TELEPHONE 1900 North 18th, Monroe, LA 71211/318-388-9500	943	857	816	22	47	CITICORP 399 Park Ave., New York, NY 10043/212-559-1000	12	12	1	3	190	COMPUTER ASSOCS. 711 Stewart Ave., Garden City, NY 11530/516-227-3300	610	319	614	18
956	CETUS 1400 53rd St., Emeryville, CA 94608/415-420-3300	994	971	930	12	302	CITIZENS UTILITIES High Ridge Park, Stamford, CT 06905/203-329-8800	905	518	654	22	602	COMPUTER SCIENCES 2100 East Grand Ave., El Segundo, CA 90245/213-615-0311	517	637	743	18
785	CHAMBERS DEV. 10700 Frankstown Rd., Pittsburgh, PA 15235/412-242-6237	963	886	908	21	349	CITIZENS & SOUTHERN 35 Broad St N.W., Atlanta, GA 30303/404-581-2121	366	248	75	3	237	CONAGRA One Central Park Plaza, Omaha, NE 68102/402-978-4000	62	279	322	10

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	
99	CONS. EDISON Four Irving Pl, New York, NY 10003/212-460-4600	158	75	155	24
461	CONS. FREIGHTWAYS 175 Linfield Dr, Menlo Park, CA 94025/415-326-1700	299	385	540	23
180	CONS. NATURAL GAS 625 Liberty Ave, Pittsburgh, PA 15222/412-227-1000	320	260	328	24
360	CONS. PAPERS 231 First Ave N., Wisconsin Rapids, WI 54494/715-422-3111	620	309	685	19
244	CONSOLIDATED RAIL 17th St. & JFK Blvd, Philadelphia, PA 19103/215-977-4000	232	171	198	23
975	CONS. STORES 2020 Corvair Ave, Columbus, OH 43207/614-224-1297	720	863	888	8
148	CONTEL 245 Perimeter Center, Atlanta, GA 30346/404-391-8000	270	168	238	22
297	CONTEL CELLULAR 9000 Central Park West, Atlanta, GA 30328/404-698-6100	993	933	965	22
575	CONTINENTAL BANK 231 South LaSalle St, Chicago, IL 60697/312-828-2345	260	164	42	3
327	CONTINENTAL CORP. 180 Maiden Lane, New York, NY 10038/212-440-3000	128	363	108	17
559	CONTROL DATA 8100 34th Ave South, Minneapolis, MN 55425/612-853-8100	217	934	418	18
203	COOPER INDUSTRIES 1001 Fannin, Houston, TX 77002/713-739-5400	187	233	303	9
803	COOPER TIRE 701 Lima Ave, Findlay, OH 45839/419-423-1321	670	704	843	2
659	COORS (ADOLPH) Golden, CO 80401/303-279-6565	459	660	545	6
347	CORESTATES FNCL. Broad & Chestnut Sts, Philadelphia, PA 19101/215-629-3100	436	272	93	3
189	CORNING GLASS Houghton Park, Corning, NY 14831/607-974-9000	362	181	392	15
773	CORROON & BLACK 88 Pine St, New York, NY 10005/212-363-4100	825	382	678	17
850	COSTCO WHOLESALE 10809 120th Ave N.E., Kirkland, WA 98033/206-828-8100	356	909	799	8
137	CPC INTERNATIONAL International Plaza, Englewood Cliffs, NJ 07632/201-894-4000	173	184	358	10
959	CPI 1706 Washington Ave, St. Louis, MO 63103/314-231-1575	897	824	961	14
765	CRANE 757 Third Ave, New York, NY 10017/212-415-7300	500	643	732	15
329	CRAY RESEARCH 1200 Northstar East, Minneapolis, MN 55402/612-333-5889	666	301	664	18
640	CRESTAR FINANCIAL 919 East Main St, Richmond, VA 23219/804-782-5000	582	464	142	3
753	CROSS (A. T.) One Albion Rd, Lincoln, RI 02865/401-333-1200	927	750	963	15
416	CROWN CORK & SEAL 9300 Ashton Rd, Philadelphia, PA 19136/215-698-5100	408	444	635	7
161	CSX 901 East Cary St, Richmond, VA 23219/804-782-1400	102	970	110	23
679	CUMMINS ENGINE 500 Jackson St, Columbus, IN 47201/812-377-5000	240	981	464	2
943	CYPRESS SEMICON. 3901 North First St, San Jose, CA 95134/408-943-2600	962	871	937	9
496	CYPRUS MINERALS 9100 E. Mineral Circle, Englewood, CO 80112/303-643-5000	498	282	532	11

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359	DANA 4500 Dorr St, Toledo, OH 43615/419-535-4500	155	291	283	2
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ALPHABETICAL LIST OF COMPANIES

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE
AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT. RANK	COMPANY	OTHER RANKINGS			IND NO	MKT. RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
961	DAMARER 3524 Water St N.W., Washington, DC 20007/202-333-1805	690	712	781	2	964	DSC COMMUNS. 1000 Coit Rd, Plano, TX 75075/214-519-3000	880	882	850	22	2	EXXON 1251 Ave of the Americas, NY, NY 10020/212-333-1000	3	3	16	11
833	DATA GENERAL 4400 Computer Dr, Westborough, MA 01580/508-366-8911	497	977	642	18	9	DU PONT 1007 Market St, Wilmington, DE 19898/302-774-1000	11	7	41	4						
905	DAUPHIN DEPOSIT 213 Market St, Harrisburg, PA 17101/717-255-2121	906	707	359	3	121	DUKE POWER 422 South Church St, Charlotte, NC 28242/704-373-4011	218	108	165	24			F			
153	DAYTON HUDSON 777 Nicollet Mall, Minneapolis, MN 55402/612-370-6948	45	188	210	8	48	DUN & BRADSTREET 299 Park Ave, New York, NY 10171/212-593-6800	185	90	272	20	234	FEDERAL EXPRESS 2005 Corporate Ave, Memphis, TN 38194/901-369-3600	188	262	365	23
590	DEAN FOODS 3600 North River Rd, Franklin Park, IL 60131/312-678-1680	440	618	792	10	484	DUQUESNE LIGHT 301 Grant St, Pittsburgh, PA 15279/412-393-6000	563	327	327	24	102	FED. NATL. MORTGAGE 3900 Wisconsin Ave N.W., Wash, DC 20016/202-752-7000	55	88	5	17
147	DEERE John Deere Rd, Moline, IL 61265/309-765-8000	149	177	244	15							485	FEDERAL PAPER 75 Chestnut Ridge Rd, Montvale, NJ 07645/201-391-1776	550	318	579	7
584	DELMARVA POWER 800 King St, Wilmington, DE 19899/302-429-3011	662	475	479	24							709	FEDERAL-MOGUL 26555 N'western Hwy, Southfield, MI 48034/313-354-7700	540	686	714	2
206	DELTA AIR LINES 1040 Delta Blvd, Atlanta, GA 30214/404-765-2600	105	151	241	23							730	FERRO One Erieview Plaza, Cleveland, OH 44114/216-641-8580	583	661	786	4
254	DELUXE 1080 W. County Rd F, Shoreview, MN 55126/612-483-7111	532	317	719	18	555	E-SYSTEMS 6250 LBJ Fwy, Dallas, TX 75240/214-661-1000	469	517	729	9	628	FGIC 175 Water St, New York, NY 10038/212-607-3000	973	515	677	17
896	DENNISON MFG. 300 Howard St, Framingham, MA 01701/508-879-0511	686	728	825	18	749	EASTERN GAS & FUEL 9 Riverside Rd, Weston, MA 02193/617-647-2300	702	632	644	24	473	FIFTH THIRD BANC. 38 Fountain Sq Plaza, Cincinnati, OH 45263/513-579-5300	783	481	261	3
228	DETROIT EDISON 2000 Second Ave, Detroit, MI 48226/313-237-8000	256	993	138	24	893	EASTERN UTILITIES One Liberty Square, Boston, MA 02109/617-357-9590	861	709	598	24	676	FIGGIE INTL. 4420 Sherwin Rd, Willoughby, OH 44094/216-953-2700	531	573	721	5
605	DEXTER One Elm St, Windsor Locks, CT 06096/203-627-9051	643	713	774	4	24	EASTMAN KODAK 343 State St, Rochester, NY 14650/716-724-4000	28	15	64	14	364	FIREMAN'S FUND 777 San Marin Dr, Novato, CA 94998/415-899-2000	214	207	133	17
841	DIAMOND SHAMROCK 9830 Colonnade Blvd, San Antonio, TX 78230/512-641-6800	412	617	705	11	269	EATON 1111 Superior Ave N.E., Cleveland, OH 44114/216-523-5000	235	227	377	2	791	FIRST ALA. BANC. 417 North 20th St, Birmingham, AL 35203/205-326-7100	800	596	263	3
728	DIEBOLD 818 Mulberry Rd S.E., Canton, OH 44707/216-489-4000	816	789	836	18	534	ECHLIN 100 Double Beach Rd, Branford, CT 06405/203-481-5751	493	561	625	2	814	FIRST AMERICAN 300 Union St, Nashville, TN 37237/615-748-2000	693	795	199	3
32	DIGITAL EQUIPMENT 146 Main St, Maynard, MA 01754/508-493-5111	44	22	145	18	600	ECOLAB 370 Wabasha St, St. Paul, MN 55102/612-293-2233	526	679	683	6	435	FIRST BANK SYSTEM 1200 First Bank Pl E., Minneapolis, MN 55480/612-370-5100	389	997	62	3
355	DILLARD DEPT. 900 West Capitol Ave, Little Rock, AR 72201/501-376-5200	308	383	510	8	917	EDISON BROTHERS 501 North Broadway, St. Louis, MO 63102/314-331-6000	614	743	812	8	238	FIRST CHICAGO One First National Plaza, Chicago, IL 60670/312-732-4000	168	86	27	3
42	DISNEY (WALT) 500 South Buena Vista St, Burbank, CA 91521/818-56-1000	211	77	242	14	874	EDWARDS (A. G.) One North Jefferson Ave, St. Louis, MO 63103/314-289-3000	799	807	647	17	904	FIRST CITY TEXAS 1001 Main, Houston, TX 77002/713-658-6011	632	558	118	3
910	DIVERSIFIED ENERGIES 201 South Seventh St, Minneapolis, MN 55402/612-372-4664	661	779	713	24	528	EG&G 45 William St, Wellesley, MA 02181/617-273-5100	477	547	804	21	916	FIRST EMPIRE STATE One M&T Plaza, Buffalo, NY 14240/716-842-4200	764	675	237	3
626	DOMINION BANKS. 201 South Jefferson St, Roanoke, VA 24011/703-563-7000	618	484	163	3	862	EL PASO ELECTRIC 303 North Oregon St, El Paso, TX 79901/915-543-5711	854	800	466	24	438	FIRST EXECUTIVE 11444 W. Olympic, Los Angeles, CA 90064/213-312-1000	262	257	85	17
139	DOMINION RES. 701 East Byrd St, Richmond, VA 23219/804-775-5700	237	94	144	24	65	EMERSON ELECTRIC 8000 W. Florissant, St. Louis, MO 63136/314-553-2000	114	84	257	9	891	FIRST FINANCIAL Three Corporate Square, Atlanta, GA 30329/404-321-0120	826	805	810	18
196	DONNELLEY (R. R.) 2223 Martin Luther King Dr, Chicago, IL 60616/312-326-8000	277	250	434	21	230	EMHART 426 Colt Hwy, Farmington, CT 06032/203-678-3000	289	355	425	15	855	FIRST FLORIDA BANKS 111 East Madison St, Tampa, FL 33602/813-224-1111	796	646	267	3
298	DOVER 277 Park Ave, New York, NY 10172/212-826-7160	388	312	572	15	526	ENGELHARD Menlo Park, Edison, NJ 08818/201-632-6000	329	563	563	4	847	FIRST HAWAIIAN 165 South King St, Honolulu, HI 96813/808-525-7000	853	688	311	3
17	DOW CHEMICAL 2030 Dow Center, Midland, MI 48674/517-636-1000	32	6	94	4	319	ENRON 1400 Smith St, Houston, TX 77002/713-853-6161	134	343	168	24	888	FIRST ILLINOIS 800 Davis St, Evanston, IL 60204/312-866-6000	947	806	524	3
182	DOW JONES 200 Liberty St, New York, NY 10281/212-416-2000	441	226	454	20	465	ENSERCH 300 South St, Paul St, Dallas, TX 75201/214-651-8700	293	914	383	24	266	FIRST INTERSTATE 707 Wilshire Blvd, Los Angeles, CA 90017/213-614-3001	126	420	20	3
492	DPL Courthouse Plaza S W, Dayton, OH 45401/513-224-6000	591	331	415	24	658	ENVIRODYNE INDS. 142 East Ontario St, Chicago, IL 60611/312-649-0600	790	651	837	15	638	FIRST MARYLAND 25 South Charles St, Baltimore, MD 21201/301-224-4000	707	625	224	3
991	DRESS BARN 88 Hamilton Ave, Stamford, CT 06904/203-327-4242	925	893	995	8	667	EQUIFAX 1600 Peachtree St N.W., Atlanta, GA 30309/404-885-8000	674	765	854	17	915	FIRST MISSISSIPPI 700 North St, Jackson, MS 39202/601-948-7550	885	836	851	4
235	DRESSER INDUSTRIES 1600 Pacific, Dallas, TX 75201/214-740-6000	200	330	391	15	637	EQUITABLE RES. 420 Blvd of the Allies, Pittsburgh, PA 15219/412-261-3000	839	656	655	24	762	FIRST N. CINCINNATI 425 Walnut St, Cincinnati, OH 45201/513-632-4000	769	611	246	3
446	DREYFUS 222 Broadway, New York, NY 10038/212-238-4000	913	452	755	17	627	ESSELTE BUSINESS 71 Clinton Rd, Garden City, NY 11530/516-741-1477	480	588	636	18	837	FIRST OF AMERICA 108 East Michigan Ave, Kalamazoo, MI 49007/616-383-9000	624	457	152	3
						195	ETHYL 330 South Fourth St, Richmond, VA 23219/804-788-5000	380	221	445	4						

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
834	FIRST PENNSYLVANIA	723	597	222	3	731	FLOWERS INDUSTRIES	668	705	845	10	768	FPT. McMORAN GOLD	975	816	966	16
	16th & Market Sts, Philadelphia, PA 19101/215-786-5000						U.S. Highway 19, Thomasville, GA 31799/912-226-9110						1615 Poydras St, New Orleans, LA 70112/504-582-4000				
899	FIRST TENNESSEE	731	626	233	3	303	FLUOR	146	545	461	21	839	FRUIT OF THE LOOM	585	521	495	6
	165 Madison Ave, Memphis, TN 38101/901-523-4444						3333 Michelson Dr, Irvine, CA 92730/714-975-2000						233 South Wacker Dr, Chicago, IL 60606/312-876-7000				
252	FIRST UNION	275	176	48	3	433	FMC	242	348	403	15	695	FUQUA INDUSTRIES	608	508	616	5
	301 South Tryon St, Charlotte, NC 28288/704-374-6161						200 East Randolph Dr, Chicago, IL 60601/312-861-6000						4900 Ga-Pacific Center, Atlanta, GA 30303/404-658-9000				
979	FIRST UN. REAL EST.	986	856	869	13	607	FMC GOLD	951	579	985	16						
	55 Public Square, Cleveland, OH 44113/216-781-4030						5011 Meadowood Way, Reno, NV 89502/702-827-3777										
757	FIRST VIRGINIA	794	581	281	3	178	FOOD LION	210	386	682	10						
	6400 Arlington Blvd, Falls Church, VA 22046/703-241-4000						2110 Executive Dr, Salisbury, NC 28144/704-633-8250										
245	FIRST WACHOVIA	378	209	70	3	8	FORD MOTOR	2	2	3	2						
	301 North Main St, Winston-Salem, NC 27150/919-770-5000						The American Rd, Dearborn, MI 48121/313-322-3000					387	GAF	598	453	562	4
712	FIRSTAR	639	393	186	3	867	FOREMOST OF AMER.	807	846	716	17	78	GANNETT	239	139	331	20
	777 E. Wisconsin Ave, Milwaukee, WI 53202/414-765-4321						5800 Foremost S.E., Gd Rapids, MI 49506/616-942-3000						1100 Wilson Blvd, Arlington, VA 22209/703-284-6000				
729	FISHER SCIENTIFIC	601	724	790	12	998	FOREST CITY ENTS.	982	931	858	13	386	GAP	518	519	826	8
	11255 N. Torrey Pines, La Jolla, CA 92037/619-457-3565						10800 Brookpark Rd, Cleveland, OH 44130/216-267-1200						900 Cherry Ave, San Bruno, CA 94066/415-952-4400				
653	FLEETWOOD ENTS.	452	552	769	14	795	FOREST LABS.	981	876	957	12	835	GATX	738	658	410	23
	3125 Myers St, Riverside, CA 92523/714-351-3500						150 East 58th St, New York, NY 10155/212-421-7850						120 South Riverside Plaza, Chicago, IL 60606/312-621-6200				
204	FLEET/NORSTAR	261	156	47	3	706	FOSTER WHEELER	567	815	626	21	289	GEICO	423	339	375	17
	One Norstar Plaza, Albany, NY 12207/518-447-4043						Perryville Corporate Park, Clinton, NJ 08809/201-730-4000						Geico Plaza, Washington, DC 20076/301-986-3000				
551	FLEMING	60	560	428	10	926	FOXBORO	762	918	842	9	737	GENCORP	402	613	594	1
	6301 Waterford Blvd, Okla. City, OK 73118/405-840-7200						Bristol Park, Foxboro, MA 02035/508-543-8750						175 Ghent Rd, Fairlawn, OH 44313/216-869-4200				
479	FLIGHTSAFETY INTL.	946	636	846	23	149	FPL GROUP	129	93	127	24	358	GENENTECH	890	874	757	12
	La Guardia Airport, Flushing, NY 11371/718-565-4100						11770 U.S. Hwy 1, N. Palm Beach, FL 33408/407-694-6300						Pt San Bruno Blvd, So. San Francisco, CA 94080/415-266-1000				
769	FLA. EAST COAST	948	748	794	23	613	FRANKLIN RESOURCES	934	548	877	17	337	GENERAL CINEMA	326	425	482	6
	1650 Prudential Dr, Jacksonville, FL 32207/904-396-6600						777 Manners Is. Bl, San Mateo, CA 94404/415-570-3000						27 Baylston St, Chestnut Hill, MA 02167/617-232-8200				
685	FLORIDA NATL. BANKS	669	755	187	3	255	FREEMPORT McMORAN	391	169	333	4	257	GENERAL DYNAMICS	72	132	227	1
	225 Water St, Jacksonville, FL 32202/904-359-5111						1615 Poydras St, New Orleans, LA 70112/504-582-4000						Pierre Laclede Center, St. Louis, MO 63105/314-889-8200				
334	FLORIDA PROGRESS	382	256	307	24	611	FPT. McMOR. COPPER	881	441	914	16	3	GENERAL ELECTRIC	7	5	6	5
	270 First Ave South, St. Petersburg, FL 33701/813-895-1700						6110 Plumas St, Reno, NV 89509/702-826-3000						3135 Easton Tpk, Fairfield, CT 06431/203-373-2211				



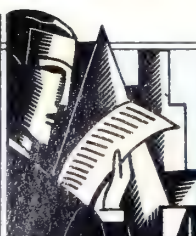
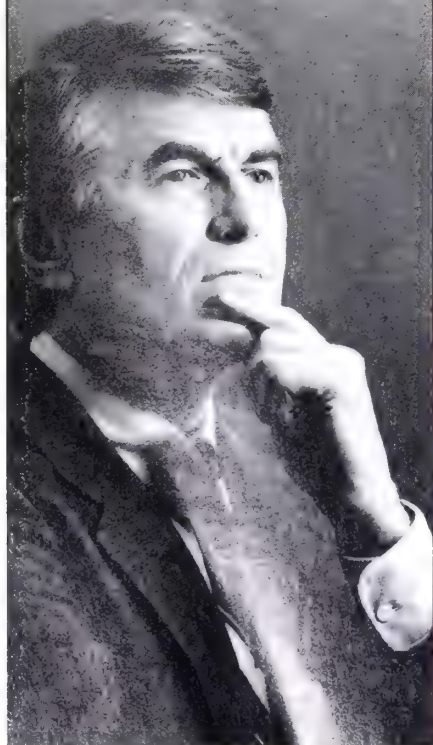
There are many forms
of native American art. This
is the one you drink.



WILD TURKEY

8 years old, 101 proof, pure Kentucky.

When
it comes to
heating
and air
conditioning,
over
50,000
leading
executives
think one way.



ALPHABETICAL LIST

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
508	GEN. INSTRUMENT 767 Fifth Ave., New York, NY 10153/212-207-6200	511	479	577	9	456	GREYHOUND 111 West Clarendon Ave., Phoenix, AZ 85077/602-248-4000	241	445	355	5
114	GENERAL MILLS One Gen. Mills Bldg., Minneapolis, MN 55426/612-540-2311	150	192	395	10	636	GRUMMAN 1101 Stewart Ave., Bethpage, NY 11714/516-575-0574	215	465	414	1
6	GENERAL MOTORS 3044 West Grand Blvd., Detroit, MI 48202/313-556-5000	1	4	2	2	23	GTE One Stamford Forum, Stamford, CT 06904/203-965-2000	33	21	40	22
261	GENERAL PUBLIC UTS. 100 Interpace Pkwy., Parsippany, NJ 07054/201-263-6500	279	165	221	24	535	GULF STATES UTS. 350 Pine St., Beaumont, TX 77701/409-838-6631	460	417	208	24
80	GENERAL RE Financial Centre, Stamford, CT 06904/203-328-5000	294	85	162	17	89	GULF & WESTERN 15 Columbus Circle, New York, NY 10023/212-373-8000	254	128	253	5
522	GENERAL SIGNAL Two High Ridge Park, Stamford, CT 06904/203-357-8800	422	837	567	9	H					
202	GENUINE PARTS 2999 Circle 75 Pkwy., Atlanta, GA 30339/404-953-1700	272	270	615	21						
483	GEORGIA GULF 400 Perimeter Center, Atlanta, GA 30346/404-395-4500	566	258	835	4	175	HALLIBURTON 3600 Lincoln Plaza, Dallas, TX 75201/214-978-2600	167	477	284	11
143	GEORGIA-PACIFIC 133 Peachtree St N.E., Atlanta, GA 30303/404-521-4000	74	100	200	19	647	HAMILTON OIL 1560 Broadway, Denver, CO 80202/303-863-3000	939	897	633	11
413	GERBER PRODUCTS 445 State St., Fremont, MI 49412/616-928-2000	581	507	760	10	675	HANDLEMAN 500 Kirts Blvd., Troy, MI 48064/313-362-4400	717	714	881	21
887	GERBER SCIENTIFIC 83 Gerber Rd West, South Windsor, CT 06074/203-644-1551	909	786	942	18	821	HANNA (M. A.) 1301 East 9th St., Cleveland, OH 44114/216-589-4000	560	483	674	4
394	GIANT FOOD 6300 Sheriff Rd., Landover, MD 20785/301-341-4100	274	456	675	10	820	HANNAFORD BROS. 145 Pleasant Hill Rd., Scarborough, ME 04074/207-883-2911	513	808	864	10
945	GIBSON GREETINGS 2100 Section Rd., Cincinnati, OH 45237/513-841-6600	842	754	894	14	748	HANOVER INSURANCE 100 North Parkway, Worcester, MA 01605/508-853-7200	449	373	411	17
166	GILLETTE Prudential Tower Bldg., Boston, MA 02199/617-421-7000	223	196	397	6	714	HARCOURT BRACE 6277 Sea Harbor Dr., Orlando, FL 32821/407-345-2000	512	979	450	20
518	GLATFELTER (P. H.) 228 South Main St., Spring Grove, PA 17362/717-225-4711	742	487	759	19	582	HARLAND (JOHN H.) 2939 Miller Rd., Decatur, GA 30035/404-981-9460	883	621	910	18
705	GLENFED 700 North Brand Blvd., Glendale, CA 91203/818-500-2000	318	304	59	17	802	HARNISCHFEGGER INDS. 13400 Bishops Lane, Brookfield, WI 53005/414-671-4400	519	723	606	15
948	GOLDEN NUGGET 129 East Fremont St., Las Vegas, NV 89101/702-385-7111	953	947	640	14	474	HARRIS 1025 West NASA Blvd., Melbourne, FL 32919/407-727-9100	364	540	467	9
466	GOLDEN WEST FNCL. 1901 Harrison St., Oakland, CA 94612/415-446-6000	475	325	92	17	666	HARSCO P.O. Box 8888, Camp Hill, PA 17001/717-763-7064	502	791	691	15
405	GOODRICH (B. F.) 3925 Embassy Pkwy., Akron, OH 44313/216-374-2000	323	244	462	4	566	HARTFORD STEAM One State St., Hartford, CT 06102/203-722-1866	808	532	737	17
212	GOODYEAR TIRE 1144 East Market St., Akron, OH 44316/216-796-2121	54	147	169	2	822	HARTMARX 101 North Wacker Dr., Chicago, IL 60606/312-372-6300	541	730	735	6
906	GOULDS PUMPS 240 Fall St., Seneca Falls, NY 13148/315-568-2811	812	859	871	15	531	HASBRO 200 Narragansett, Pawtucket, RI 02862/401-727-5000	488	524	624	14
225	GRACE (W. R.) 1114 Ave of the Americas, NY, NY 10036/212-819-5500	132	261	264	4	688	HAWAIIAN ELECTRIC 900 Richards St., Honolulu, HI 96813/808-543-5662	678	586	412	24
374	GRAINGER (W. W.) 5500 West Howard St., Skokie, IL 60077/312-982-9000	456	400	684	21	684	HECHINGER 3500 Pennsy Dr., Landover, MD 20785/301-341-1000	579	647	763	8
306	GREAT A&P 2 Paragon Dr., Montvale, NJ 07645/201-573-9700	70	368	436	10	923	HECLA MINING 6500 Mineral Dr., Coeur D'Alene, ID 83814/208-769-4100	977	398	956	16
455	GREAT LAKES CHEM. Highway 52 N.W., West Lafayette, IN 47906/317-497-6100	728	416	771	4	74	HEIMZ (H. J.) 600 Grant St., Pittsburgh, PA 15219/412-456-5700	137	116	321	10
259	GREAT NORTHERN 401 Merritt 7, Norwalk, CT 06856/203-845-9000	221	153	330	19	718	HELMERICH & PAYNE Utica at 21st St., Tulsa, OK 74114/918-742-5531	960	877	787	11
277	GREAT WESTERN 8484 Wilshire Blvd., Beverly Hills, CA 90211/213-852-3411	250	206	37	17	265	HERCULES 1313 North Market St., Wilmington, DE 19894/302-594-5000	285	372	360	4
790	GREIF BROS. 621 Pennsylvania Ave., Delaware, OH 43015/614-363-1271	833	796	925	7	249	HERSHEY FOODS 100 Mansion Rd East, Hershey, PA 17033/717-534-7500	353	314	502	10

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	
36	HEWLETT-PACKARD 3000 Hanover St., Palo Alto, CA 94304/415-857-1501	63	43	188	18
827	HIBERNIA 313 Carondelet St., New Orleans, LA 70130/504-586-5552	755	622	239	3
497	HILLENBRAND INDS. Highway 46, Batesville, IN 47006/812-934-7000	625	538	734	15
223	HILTON HOTELS 9336 Civic Center Dr., Beverly Hills, CA 90209/213-278-4321	603	342	483	14
231	HIMONT 2801 Centerville Rd., Wilmington, DE 19850/302-996-6000	426	135	481	4
588	HOLIDAY 1023 Cherry Rd., Memphis, TN 38117/901-762-8600	443	377	451	14
462	HOLLY FARMS 1755-D Lynnfield Rd., Memphis, TN 38119/901-761-3610	416	543	720	10
993	HOM BENEFICIAL 3901 West Broad St., Richmond, VA 23230/804-358-8431	942	692	638	17
330	HOM DEPOT 2727 Paces Ferry Rd., Atlanta, GA 30339/404-433-8211	384	506	747	8
848	HOM GROUP 59 Maiden Lane, New York, NY 10038/212-530-6800	267	491	107	17
786	HOM SHOPPING 12000 25th Court N., St. Pete., FL 33716/813-572-8585	672	870	793	8
641	HOMFED 625 Broadway, San Diego, CA 92101/619-699-8000	450	390	90	17
388	HOMESTAKE MINING 650 California St., San Francisco, CA 94108/415-981-8150	824	565	673	16
981	HON INDUSTRIES 414 East Third St., Muscatine, IA 52761/319-264-7400	767	831	921	18
210	HONEYWELL 2701 Fourth Ave S., Minneapolis, MN 55408/612-870-5200	110	998	270	9
571	HORMEL (GEO. A.) 501 16th Ave N.E., Austin, MN 55912/507-437-5611	337	576	745	10
158	HOSPITAL CORP. One Park Plaza, Nashville, TN 37203/615-327-9551	192	201	256	12
668	HOUGHTON MIFFLIN One Beacon St., Boston, MA 02108/617-725-5000	864	849	911	20
260	HOUSEHOLD INTL. 2700 Sanders Rd., Prospect Heights, IL 60070/312-564-5000	509	269	76	5
174	HOUSTON INDUSTRIES 4300 Post Oak Pkwy., Houston, TX 77027/713-629-3000	220	104	146	24
524	HUBBELL 584 Derby-Milford Rd., Orange, CT 06477/203-799-4100	729	528	805	9
209	HUMANA 500 West Main St., Louisville, KY 40201/502-580-1000	224	220	348	12
823	HUNT (J. B.) Hwy 71 North, Lowell, AR 72745/501-659-8800	849	772	909	23
632	HUNTINGTON BANC. 41 South High St., Columbus, OH 43287/614-476-8300	627	462	158	3
434	IMC FERTILIZER 2315 Sanders Rd., Northbrook, IL 60062/312-564-8600	537	361	547	4
980	IMO INDUSTRIES 3450 Princeton Pike, Lawrenceville, NJ 08648/609-896-7600	696	818	730	15
807	INDIANA NATIONAL One Indiana Square, Indianapolis, IN 46266/317-266-6000	757	610	235	3
288	INGERSOLL-RAND 200 Chestnut Ridge, W'cliff Lake, NJ 07675/201-573-3212	264	294	421	15
380	INLAND STEEL INDS. 30 West Monroe St., Chicago, IL 60603/312-346-0300	197	205	386	16
735	INSPIRATION RES. 250 Park Ave., New York, NY 10177/212-503-3100	470	697	706	16
700	INTEGRA FINANCIAL Franklin & Water Sts., Titusville, PA 16354/814-827-2751	711	556	205	3
123	INTEL 3065 Bowers Ave., Santa Clara, CA 95051/408-765-8080	278	107	343	9
567	INTERGRAPH One Madison Ind. Pk., Huntsville, AL 35807/205-772-2000	651	460	709	18
889	INTERLAKE 701 Harger Rd., Oak Brook, IL 60521/312-572-6600	622	717	762	15
976	INTL. DAIRY QUEEN 5701 Green Valley, Bloomington, MN 55437/612-830-0200	922	880	987	14
292	INTL. FLAVORS 521 West 57th St., New York, NY 10019/212-765-5500	641	351	695	6
617	INTL. LEASE FIN. 8484 Wilshire Blvd., Beverly Hills, CA 90211/213-658-7871	936	687	501	23
557	INTL. MINERALS 2315 Sanders Rd., Northbrook, IL 60062/312-564-8600	571	498	463	4
951	INTL. MULTIFOODS 33 South Sixth St., Minneapolis, MN 55402/612-340-3300	406	747	702	10
100	INTERNATIONAL PAPER Two Manhattanville Rd., Purchase, NY 10577/914-397-1500	73	54	166	19
548	INTERPUBLIC GROUP 1271 Ave of the Americas, NY, NY 10020/212-399-8000	535	585	584	21
898	INTERTAN 2000 Two Tandy Ctr., Ft Worth, TX 76102/817-332-7181	730	788	870	6
914	IOWA RESOURCES 666 Grand Ave., Des Moines, IA 50303/515-281-2900	873	767	604	24
799	IOWA-ILLINOIS G&E 206 East Second St., Davenport, IA 52801/319-326-7111	787	594	593	24
577	IPALCO ENTERPRISES 25 Monument Circle, Indianapolis, IN 46206/317-261-8261	732	407	506	24
489	ITEL Two North Riverside Plaza, Chicago, IL 60606/312-902-1515	429	841	341	5
57	ITT 320 Park Ave., New York, NY 10022/212-752-6000	79	29	106	5
242	JAMES RIVER Tredegar St., Richmond, VA 23217/804-644-5411	138	212	255	19
449	JEFFERSON SMURFIT 8182 Maryland Ave., St. Louis, MO 63105/314-746-1100	516	315	726	7
418	JEFFERSON-PILOT 101 North Elm St., Greensboro, NC 27420/919-378-2000	522	431	313	17
990	JERRICO 101 Jerrico Dr., Lexington, KY 40511/606-263-6000	713	892	849	14
421	JOHNSON CONTROLS 5757 N. Green Bay, Milwaukee, WI 53201/414-228-1200	248	410	468	9
22	JOHNSON & JOHNSON One J&J Plaza, New Brunswick, NJ 08933/201-524-0400	81	37	206	12
646	JOSTENS 5501 Norman Ctr., Minneapolis, MN 55437/612-830-3300	733	663	860	15
971	JWP 2975 Westchester Ave., Purchase, NY 10577/914-935-4000	611	819	770	21
1	IBM Old Orchard Rd., Armonk, NY 10504/914-765-1900	4	1	15	18
614	IBP IBP Ave., Dakota City, NE 68731/402-494-2061	80	570	581	10
597	IDAHO POWER 1220 Idaho St., Boise, ID 83702/208-383-2200	831	644	530	24
972	IDEAL BASIC INDS. 950 17th St., Denver, CO 80202/303-623-5661	926	957	880	13
419	ILLINOIS POWER 500 South 27th St., Decatur, IL 62525/217-424-6600	505	302	230	24
320	ILLINOIS TOOL WORKS 8501 West Higgins Rd., Chicago, IL 60631/312-693-3040	394	322	569	15

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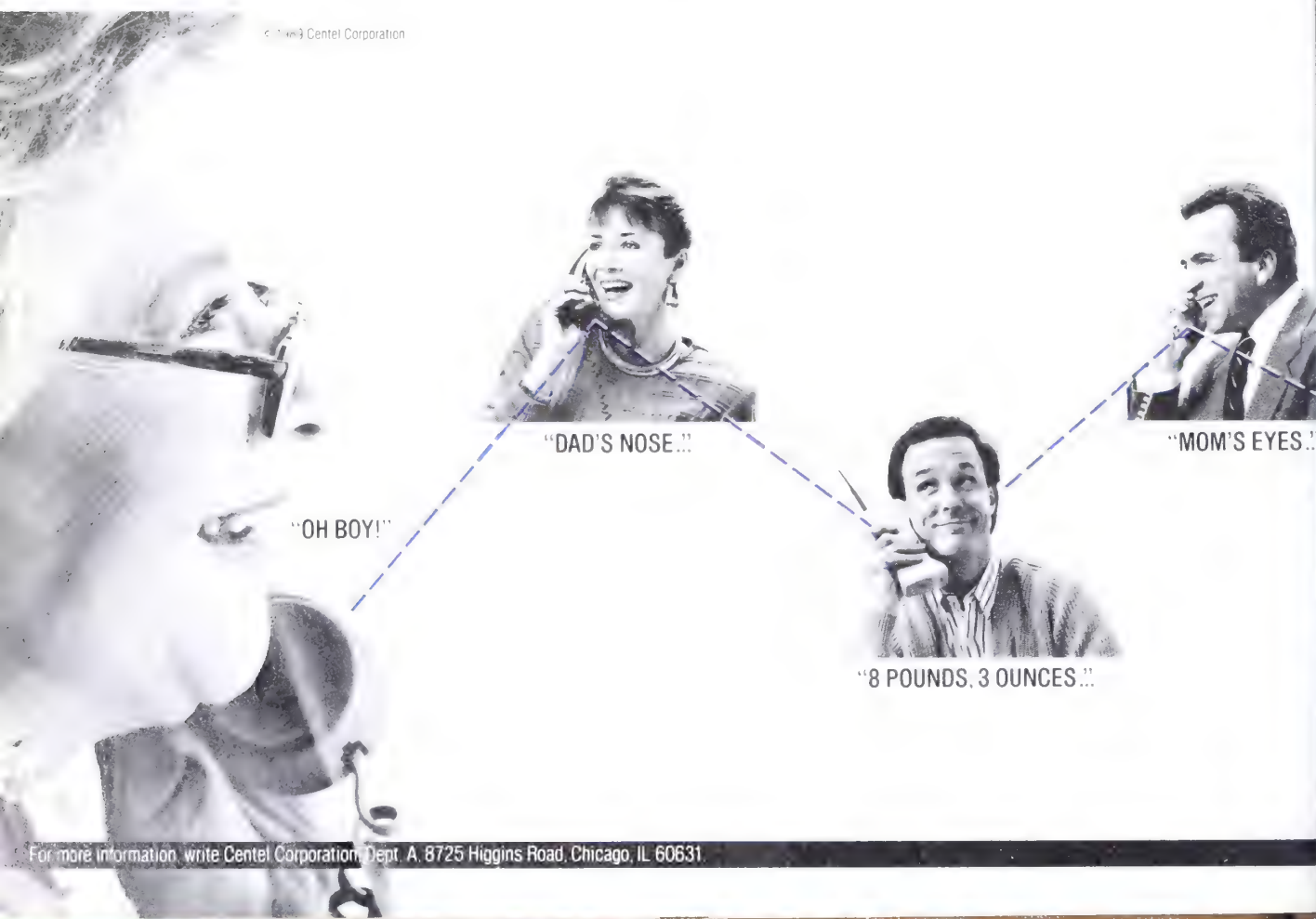


ALPHABETICAL LIST OF COMPANIES

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE
AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

		OTHER RANKINGS			IND. NO.			OTHER RANKINGS			IND. NO.							
MKT. RANK	COMPANY	SALES	PROFITS	ASSETS		MKT. RANK	COMPANY	SALES	PROFITS	ASSETS								
		K					331	KEMPER	252	249	121	17	645	KOGER PROPERTIES	966	928	766	13
						Route 22, Long Grove, IL 60049/312-540-2000						3986 Blvd Cir Dr, Jacksonville, FL 32207/904-396-4811						
							644	KENTUCKY UTILITIES	749	497	574	24	580	KROGER	22	762	288	10
						One Quality St, Lexington, KY 40507/606-255-1461						1014 Vine St, Cincinnati, OH 45202/513-762-4000						
52	K MART	15	48	120	8	281	KERR-McGEE	292	392	370	11							
						123 R. S. Kerr Ave, Oklahoma City, OK 73102/405-270-1313												
549	KANSAS CITY POWER	677	408	407	24	529	KEYCORP	481	374	103	3							
						30 South Pearl St, Albany, NY 12207/518-486-8000												
913	KANS. CITY SOUTHERN	782	976	689	23	780	KEYSTONE INTL.	875	783	885	15							
						114 West 11th St, Kansas City, MO 64105/816-556-0303												
656	KANSAS G&E	771	504	423	24	966	KIMBALL INTL.	756	787	892	6	594	LAFARGE	501	443	600	13	
						120 East First St, Wichita, KS 67202/316-261-6611												
604	KANSAS POWER	543	496	500	24	111	KIMBERLY-CLARK	151	133	310	19	741	LANCE	837	720	932	10	
						818 Kansas Ave, Topeka, KS 66612/913-296-6300												
56	KELLOGG	183	97	363	10	876	KINDER CARE	605	689	228	21	670	LANDS' END	810	778	973	8	
						One Kellogg Square, Battle Creek, MI 49016/616-961-2000												
994	KELLWOOD	684	780	856	6	702	KING WORLD	893	557	967	14	689	LEE ENTERPRISES	917	700	900	20	
						600 Kellwood Pkwy, Chesterfield, MO 63017/314-576-3100												
576	KELLY SERVICES	510	583	893	21	246	KNIGHT-RIDDER	367	310	433	20	873	LEGGETT & PLATT	648	733	828	6	
						999 West Big Beaver Rd, Troy, MI 48084/313-362-4444												
						One Herald Plaza, Miami, FL 33132/305-376-3800												
												One Leggett Rd, Carthage, MO 64836/417-358-8131						

Centel Corporation



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MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
27	LILLY (ELI)	196	52	259	12	651	LOUISVILLE G&E	709	473	503	24	128	MARSH & McLENNAN	340	179	491	17
	Lilly Corporate Center, Indianapolis, IN 46285/317-276-2000						311 West Chestnut St, Louisville, KY 40202/502-566-4011						1221 Ave of the Americas, NY, NY 10020/212-997-2000				
94	LIMITED	195	208	449	8	553	LOWE'S	311	542	627	8	677	MARSHALL & ILSLEY	697	511	211	3
	Two Limited Parkway, Columbus, OH 43230/614-479-7000						Hwy 268 East, North Wilkesboro, NC 28659/919-651-4000						770 North Water St, Milwaukee, WI 53202/414-765-7700				
124	LIN BROADCASTING	929	488	788	20	885	LSI LOGIC	857	853	742	9	240	MARTIN MARIETTA	133	161	362	1
	1370 Ave of the Americas, NY, NY 10019/212-765-1902						1551 McCarthy Blvd, Milpitas, CA 95035/408-433-8000						6801 Rockledge Dr, Bethesda, MD 20817/301-897-6000				
274	LINCOLN NATIONAL	106	267	79	17	385	LUBRIZOL	548	341	672	4	163	MASCO	322	186	379	13
	1300 South Clinton St, Fort Wayne, IN 46802/219-427-2000						29400 Lakeland Blvd, Wickliffe, OH 44092/216-943-4200						21001 Van Born Rd, Taylor, MI 48180/313-274-7400				
293	LITTON INDUSTRIES	161	278	275	9	817	LUBY'S CAFETERIAS	916	820	959	14	609	MASCO INDUSTRIES	435	489	484	2
	360 N. Crescent Dr, Beverly Hills, CA 91399/818-712-5000						2211 NE Loop 410, San Antonio, TX 78265/512-654-9000						21001 Van Born Rd, Taylor, MI 48180/313-274-7400				
365	LIZ CLAIBORNE	538	391	789	6	849	LYPHOMED	968	959	928	12	766	MATTEL	590	746	750	14
	One Claiborne St, North Bergen, NJ 07047/201-662-6000						10401 West Touhy, Rosemont, IL 60018/312-390-6500						5150 Roscerans Ave, Hawthorne, CA 90250/213-978-5150				
207	LOCKHEED	56	112	217	1							642	MAXUS ENERGY	740	980	499	11
	4500 Park Granada, Calabasas, CA 91399/818-712-2000												717 North Harwood St, Dallas, TX 75201/214-953-2000				
652	LOCTITE	822	654	874	4							86	MAY DEPT. STORES	49	89	181	8
	10 Columbus Blvd, Hartford, CT 06106/203-520-5000												611 Olive St, St. Louis, MO 63101/314-342-6300				
69	LOEWS	53	40	56	17							367	MAYTAG	403	332	669	6
	One Park Ave, New York, NY 10016/212-545-2000												403 West Fourth St North, Newton, IA 50208/515-792-8000				
813	LOME STAR INDS.	862	725	559	13	868	MACK TRUCKS	365	839	516	2	541	MBIA	957	448	588	17
	One Greenwich Plaza, Greenwich, CT 06830/203-661-3100						2100 Mack Blvd, Allentown, PA 18105/215-439-3011						445 Hamilton Ave, White Plains, NY 10602/914-681-1300				
354	LONG IS. LIGHTING	358	175	175	24	934	MAGMA POWER	995	919	945	24	152	MCA	263	286	329	14
	175 East Old Country Rd, Hicksville, NY 11801/516-933-4590						11770 Bernardo Plaza, San Diego, CA 92128/619-487-9412						100 Un. City Plaza, Universal City, CA 91608/818-777-1000				
634	LONGS DRUG STORES	395	609	820	12	788	MANOR CARE	745	951	715	12	107	McCAW CELLULAR	898	995	460	22
	141 North Civic Dr, Walnut Creek, CA 94596/415-937-1170						10750 Columbia Pike, Silver Spg, MD 20901/301-593-9600						5808 Lake Wash. N.E., Kirkland, WA 98033/206-827-4500				
623	LONGVIEW FIBRE	695	427	764	7	312	MANUF. HANOVER	86	57	18	3	831	McCLATCHY NEWS.	870	812	883	20
	End of Fibreway, Longview, WA 98632/206-425-1550						270 Park Ave, New York, NY 10017/212-286-6000						2100 Q St, Sacramento, CA 95816/916-321-1000				
540	LORAL	464	471	553	9	654	MANUF. NATIONAL	612	436	161	3	699	McCORMICK	539	749	724	10
	600 Third Ave, New York, NY 10016/212-697-1105						100 Renaissance Center, Detroit, MI 48243/313-222-4000						11350 McCormick Rd, Hunt Valley, MD 21031/301-771-7301				
519	LOTUS DEVELOPMENT	802	589	859	18	414	MAPCO	413	378	571	11	671	McDERMOTT INTL.	336	988	351	21
	55 Cambridge Pkwy, Cambridge, MA 02142/617-577-8500						1800 South Baltimore, Tulsa, OK 74119/918-581-1800						1010 Common St, New Orleans, LA 70112/504-587-5400				
488	LOUISIANA LAND	681	983	557	11	156	MARION LABS.	644	271	773	12	45	McDONALD'S	144	69	179	14
	909 Poydras St, New Orleans, LA 70112/504-566-6500						9300 Ward Pkwy, Kansas City, MO 64114/816-966-4000						McDonald's Plaza, Oak Brook, IL 60521/312-575-3000				
447	LOUISIANA-PACIFIC	415	333	486	19	165	MARRIOTT	104	219	232	14	162	McDONNELL DOUGLAS	36	148	125	1
	111 S.W. Fifth Ave, Portland, OR 97204/503-221-0800						One Marriott Dr, Washington, DC 20058/301-380-9000						McDonnell Blvd, St. Louis, MO 63134/314-232-0232				



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ALPHABETICAL LIST OF COMPANIES

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AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
176	McGRAW-HILL	411	266	505	20	377	MIDLANTIC	407	235	84	3	720	NATIONAL EDUCATION	809	664	853	21
	1221 Avenue of the Americas, NY, NY 10020/212-512-2000						499 Thornall St, Edison, NJ 08818/201-321-8000						18400 Von Karman Ave, Irvine, CA 92715/714-474-9400				
72	MCI COMMUNIS.	156	143	250	22	908	MIDWEST ENERGY	741	682	630	24	838	NATIONAL FUEL GAS	652	657	585	24
	1133 19th St N.W., Washington, DC 20036/202-872-1600						401 Douglas St, Sioux City, IA 51102/712-277-7500						30 Rockefeller Plaza, New York, NY 10112/212-541-7533				
420	McKESSON	111	450	439	12	781	MILLER (HERMAN)	663	678	823	18	603	NATL. HEALTH LABS.	923	737	907	12
	One Post St, San Francisco, CA 94104/415-983-8300						8500 Byron Rd, Zeeland, MI 49464/616-772-3300						7590 Foy Ave, La Jolla, CA 92037/619-454-3314				
952	MCN	506	640	623	24	565	MILLIPORE	724	615	803	9	932	NATL. INTERGROUP	268	972	492	5
	500 Griswold St, Detroit, MI 48226/313-965-2430						80 Ashby Rd, Bedford, MA 01730/617-275-9200						20 Stanwix St, Pittsburgh, PA 15222/412-394-4100				
985	MDU RESOURCES	878	757	668	24	20	MINNESOTA MINING	57	26	167	5	275	NATL. MEDICAL ENTS.	236	276	338	12
	400 North Fourth St, Bismarck, ND 58501/701-222-7900						3M Center, St. Paul, MN 55144/612-733-1110						11620 Wilshire Blvd, Los Angeles, CA 90025/213-479-5526				
251	MEAD	178	141	344	19	649	MINNESOTA POWER	806	522	551	24	587	NATL.SEMICONDUCTOR	313	941	488	9
	Courthouse Plaza N.E., Dayton, OH 45463/513-222-6323						30 West Superior St, Duluth, MN 55802/218-722-2641						2900 Semiconductor, S. Clara, CA 95051/408-721-5000				
800	MEASUREX	915	738	906	9	931	MINNETONKA	933	904	972	6	451	NATL. SERVICE INDS.	467	459	708	9
	One Results Way, Cupertino, CA 95014/408-255-1500						104 Peavey Rd, Chaska, MN 55318/612-448-4181						1180 Peachtree St N.E., Atlanta, GA 30309/404-892-2400				
770	MEDCO CONTAINMENT	735	843	830	12	673	MITCHELL ENERGY	739	939	475	11	375	NAVISTAR INTL.	191	215	443	2
	491 E. H. Ross Dr, Elmwood Park, NJ 07407/201-794-1000						2001 Timberloch, Woodlands, TX 77380/713-363-5500						401 North Michigan Ave, Chicago, IL 60611/312-836-2000				
506	MEDIA GENERAL	667	920	701	20	398	MNC FINANCIAL	387	281	86	3	301	NBD BANCORP	349	229	63	3
	333 East Grace St, Richmond, VA 23219/804-649-6000						10 Light St, Baltimore, MD 21202/301-244-1940						611 Woodward Ave, Detroit, MI 48226/313-225-1000				
471	MEDTRONIC	679	439	744	12	11	MOBIL	5	10	31	11	921	NCH	758	756	882	6
	7000 Central Ave N.E., Mpls, MN 55432/612-574-4000						150 East 42nd St, New York, NY 10017/212-883-4242						2727 Chemsearch Blvd, Irving, TX 75015/214-438-0211				
586	MELLON BANK	244	982	39	3	574	MOBILE COMMUNIS.	974	955	887	22	181	MCNB	281	204	45	3
	500 Grant St, Pittsburgh, PA 15258/412-234-5000						1800 E. County Line, Ridgeland, MS 39157/601-977-0888						101 South Tryon St, Charlotte, NC 28255/704-374-5000				
120	MELVILLE	115	145	404	8	877	MOHASCO	650	942	768	6	122	MCR	123	113	287	18
	3000 Westchester Ave, Harrison, NY 10528/914-253-8000						4401 Fair Lakes Court, Fairfax, VA 22033/703-968-8000						1700 South Patterson Blvd, Dayton, OH 45479/513-445-5000				
760	MENTOR GRAPHICS	904	768	916	18	568	MOLEX	754	607	808	9	745	NEIMAN-MARCUS	496	912	680	8
	8500 S. W. Creekside, Beaverton, OR 97005/503-626-7000						2222 Wellington Court, Lisle, IL 60532/312-969-4550						27 Boylston St, Chestnut Hill, MA 02167/617-232-0760				
886	MERCANTILE BANC.	700	813	220	3	73	MONSANTO	91	76	172	4	763	NERCO	705	513	601	11
	721 Locust St, St. Louis, MO 63101/314-425-2525						800 N. Lindbergh, St. Louis, MO 63167/314-694-1000						111 S.W. Columbia, Portland, OR 97201/503-796-6600				
789	MERCANTILE BANK.	866	620	347	3	562	MONTANA POWER	819	525	478	24	754	NEUTROGENA	944	850	996	6
	Two Hopkins Plaza, Baltimore, MD 21201/301-237-5900						40 East Broadway, Butte, MT 59707/406-723-5421						5755 West 96th St, Los Angeles, CA 90045/213-642-1150				
357	MERCANTILE STORES	341	316	548	8	236	MORGAN STANLEY	193	124	29	17	775	NEVADA POWER	834	635	653	24
	128 West 31st St, New York, NY 10001/212-560-0500						1251 Avenue of the Americas, NY, NY 10020/212-703-4000						6226 West Sahara Ave, Las Vegas, NV 89102/702-367-5000				
922	MERCHANTS NATL.	815	681	260	3	62	MORGAN (J. P.)	99	35	11	3	973	NEW ENG. BUSINESS	924	862	984	18
	One Merchants Plaza, Indianapolis, IN 46255/317-267-7000						23 Wall St, New York, NY 10015/212-483-2323						500 Main St, Groton, MA 01471/508-448-6111				
7	MERCK	125	23	226	12	858	MORRISON	673	810	913	14	404	NEW ENGLAND ELEC.	461	974	334	24
	P.O. Box 2000, Rahway, NJ 07065/201-574-4000						4721 Morrison Dr, Mobile, AL 36625/205-344-3000						25 Research Dr, Westborough, MA 01582/508-366-9011				
722	MEREDITH	671	785	746	20	853	MORRISON KNUDSEN	399	969	507	21	866	NEW PLAN REALTY	992	848	955	13
	1716 Locust St, Des Moines, IA 50336/515-284-3000						720 Park Blvd, Boise, ID 83729/208-386-8000						1120 Ave of the Americas, NY, NY 10036/212-869-3000				
610	MERIDIAN BANCORP	604	467	156	3	267	MORTON THIOKOL	321	298	469	4	900	NEW PROCESS	828	764	970	8
	35 North Sixth St, Reading, PA 19601/215-320-2000						110 North Wacker Dr, Chicago, IL 60606/312-807-2000						220 Hickory St, Warren, PA 16366/814-723-3600				
200	MERRILL LYNCH	58	102	19	17	98	MOTOROLA	92	110	214	9	424	NEW YORK STATE E&G	494	280	289	24
	250 Vesey St, New York, NY 10281/212-449-1000						1303 E. Algonquin, Schaumburg, IL 60196/312-397-5000						4500 Vestal Pkwy E., Binghamton, NY 13903/607-729-2551				
379	METRO MOBILE CTS	988	973	944	22	499	MULTIMEDIA	821	827	857	20	270	NEW YORK TIMES	428	297	480	20
	110 East 59th St, New York, NY 10022/212-319-7444						305 South Main St, Greenville, SC 29602/803-298-4373						229 West 43rd St, New York, NY 10036/212-556-1234				
927	MEYER (FRED)	370	742	751	8	431	MURPHY OIL	457	721	471	11	620	NEWELL	592	577	712	15
	3800 S.E. 22nd Ave, Portland, OR 97202/503-232-8844						200 Peach St, El Dorado, AR 71730/501-862-6411						29 East Stephenson St, Freeport, IL 61032/815-235-4171				
579	MGM/UA COMMUNIS.	704	985	573	14							154	NEWMONT GOLD	850	403	815	16
	450 N. Roxbury Dr, Beverly Hills, CA 90210/213-281-4000												1700 Lincoln St, Denver, CO 80203/303-863-7414				
662	MICHIGAN NATIONAL	575	446	132	3							211	NEWMONT MINING	786	433	512	16
	27777 Inkster Rd, Farmington Hills, MI 48018/313-473-3000												1700 Lincoln St, Denver, CO 80203/303-863-7414				
680	MICRON TECHNOLOGY	865	369	818	9	390	NALCO CHEMICAL	589	406	707	4	350	NIAGARA MOHAWK	286	245	203	24
	2805 East Columbia Rd, Boise, ID 83706/208-383-4000						One Nalco Center, Naperville, IL 60566/312-961-9500						300 Erie Blvd West, Syracuse, NY 13202/315-474-1511				
233	MICROSOFT	689	308	777	18	287	NATIONAL CITY	344	218	72	3	538	NICOR	463	405	457	24
	16011 N.E. 36th Way, Redmond, WA 98073/206-882-8080						1900 East Ninth St, Cleveland, OH 44114/216-575-2000						1700 West Ferry Rd, Naperville, IL 60566/312-242-4470				
160	MIDDLE SOUTH UTS.	228	91	96	24	929	NATL. COMMUN. BANK	892	696	339	3	445	NIKE	462	323	739	6
	225 Beronne, New Orleans, LA 70161/504-529-5262						113 West Essex St, Maywood, NJ 07607/201-845-1000						3900 S.W. Murray, Beaverton, OR 97005/503-641-6453				

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	
505	NIPSCO INDUSTRIES	458	367	337	24
	5265 Hohman Ave., Hammond, IN 46320/219-853-5200				
793	NOBLE AFFILIATES	941	913	811	11
	110 West Broadway, Ardmore, OK 73402/405-223-4110				
851	NORDSON	918	771	964	15
	28601 Clemens Rd., Westlake, OH 44145/216-892-1580				
222	NORDSTROM	332	366	543	8
	1501 Fifth Ave., Seattle, WA 98101/206-628-2111				
75	NORFOLK SOUTHERN	179	71	147	23
	Three Commercial Pl., Norfolk, VA 23510/804-629-2600				
805	NORTHEAST BANCORP	891	760	364	3
	205 Church St., New Haven, CT 06502/203-773-5809				
273	NORTHEAST UTILITIES	368	198	212	24
	107 Selden St., Berlin, CT 06037/203-665-5000				
291	NORTHERN STATES	381	237	295	24
	414 Nicollet Mall, Minneapolis, MN 55401/612-330-5500				
622	NORTHERN TRUST	587	397	150	3
	50 South LaSalle St., Chicago, IL 60675/312-630-6000				
411	NORTHROP	131	413	367	1
	1840 Century Park E., Los Angeles, CA 90067/213-553-6262				
503	NORTON	476	472	631	15
	120 Front St., Worcester, MA 01608/508-795-5000				
356	NORWEST	317	241	71	3
	Sixth & Marquette, Minneapolis, MN 55479/612-667-1234				
552	NOVELL	902	759	946	18
	122 East 1700 South, Provo, UT 84606/801-379-5900				
596	NOXELL	773	629	889	6
	11050 York Rd., Hunt Valley, MD 21030/301-785-7300				
490	NUCOR	565	395	693	16
	4425 Randolph Rd., Charlotte, NC 28211/704-366-7000				
309	NWA	136	335	304	23
	Mps-St. Paul Airport, St. Paul, MN 55111/612-726-2111				
29	NYNEX	41	18	57	22
	335 Madison Ave., New York, NY 10017/212-370-7400				

55	OCCIDENTAL PETROL.	21	166	78	11
	10889 Wilshire Blvd., Los Angeles, CA 90024/213-879-1700				
542	OCEAN DRILLING	840	966	645	11
	1600 Canal St., New Orleans, LA 70112/504-561-2811				
476	ODGEN	556	600	666	5
	Two Pennsylvania Plaza, New York, NY 10121/212-868-6100				
836	OGILVY GROUP	642	774	703	21
	2 East 48th St., New York, NY 10017/212-907-3400				
563	OHIO CASUALTY	451	354	387	17
	136 North Third St., Hamilton, OH 45025/513-867-3000				
185	OHIO EDISON	357	223	189	24
	76 South Main St., Akron, OH 44308/216-384-5100				
578	OHIO MATTRESS	706	770	802	6
	1228 Euclid Ave., Cleveland, OH 44115/216-522-1310				
392	OKLAHOMA G&E	553	326	419	24
	321 N. Harvey Ave., Okla. City, OK 73102/405-272-3000				
752	OLD KENT FINANCIAL	682	505	185	3
	1 Vandenberg Ctr., Grand Rapids, MI 49501/616-771-5000				
864	OLD REPUBLIC INTL.	552	630	378	17
	307 North Michigan Ave., Chicago, IL 60601/312-346-9100				
482	OLIN	335	429	474	4
	120 Long Ridge Rd., Stamford, CT 06904/203-356-2000				
824	OMNICOM GROUP	626	719	618	21
	437 Madison Ave., New York, NY 10022/212-415-3600				
373	ORACLE SYSTEMS	847	606	899	18
	20 Davis Dr., Belmont, CA 94002/415-598-8000				

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ALPHABETICAL LIST

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE AMONG THE TOP 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			INDUSTRY
		SALES	PROFITS	ASSETS	
968	ORANGE & ROCKLAND	791	674	687	24
	Blue Blue Hill Plaza, Pearl River, NY 10965/914-352-6000				
982	OSHKOSH B'GOSH	919	890	974	6
	112 Otter Ave, Oshkosh, WI 54901/414-231-8800				
693	OUTBOARD MARINE	434	531	586	14
	100 Sea-Horse Dr, Waukegan, IL 60085/312-689-6200				
598	OVERSEAS SHIPBLDG.	901	662	583	23
	1114 Ave of the Americas, NY, NY 10036/212-869-1222				
467	OWENS-CORNING	280	254	533	13
	Fiberglas Tower, Toledo, OH 43659/419-248-8000				
P					
344	PACCAR	255	275	396	2
	777 106th Ave N.E., Bellevue, WA 98004/206-455-7400				
232	PACIFIC ENTERPRISES	127	224	207	24
	801 South Grand Ave, Los Angeles, CA 90017/213-895-5000				
58	PACIFIC G&E	100	571	69	24
	77 Beale St, San Francisco, CA 94106/415-972-7000				
608	PACIFIC TELECOM	752	595	619	22
	805 Broadway, Vancouver, WA 98660/206-696-0983				
26	PACIFIC TELESIS GROUP	75	24	74	22
	130 Kearny St, San Francisco, CA 94108/415-882-8000				
131	PACIFICORP	229	109	131	24
	851 S.W. Sixth Ave, Portland, OR 97204/503-464-6000				
798	PAINWEBBER GROUP	314	693	89	17
	1285 Ave of the Americas, NY, NY 10019/212-713-2000				
472	PALL	811	591	778	5
	2200 Northern Blvd, East Hills, NY 11548/516-671-4000				
724	PAN AM	226	987	446	23
	Pan American Bldg, New York, NY 10166/212-880-1234				
439	PANHANDLE EASTERN	514	991	382	24
	5400 Westheimer Ct., Houston, TX 77056/713-627-5400				
928	PARK COMMUNS.	954	889	936	20
	Terrace Hill, Ithaca, NY 14850/607-272-9020				
396	PARKER HANNIFIN	324	402	497	1
	17325 Euclid Ave, Cleveland, OH 44112/216-531-3000				
345	PENN CENTRAL	454	442	426	5
	One East Fourth St, Cincinnati, OH 45202/513-579-6600				
70	PENNEY (J. C.)	35	47	116	8
	14841 North Dallas Pkwy, Dallas, TX 75240/214-591-1000				
221	PENNSYLVANIA PWR.	345	157	194	24
	Two North Ninth St, Allentown, PA 18101/215-770-5151				
532	PENNWALT	578	650	681	4
	Three Parkway, Philadelphia, PA 19102/215-587-7000				
188	PENNZOIL	361	992	296	11
	700 Milam, Houston, TX 77002/713-546-4000				
664	PEOPLES ENERGY	546	486	546	24
	122 South Michigan Ave, Chicago, IL 60603/312-431-4000				
635	PEP BOYS	716	745	797	2
	3111 W. Allegheny, Philadelphia, PA 19132/215-229-9000				

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AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
39	PEPSICO	40	51	135	6	315	PRICE	184	419	595	8	399	REPUBLIC NEW YORK	363	283	61	3
	700 Anderson Hill Rd, Purchase, NY 10577/914-253-2000						2657 Ariane Dr, San Diego, CA 92117/619-581-4600						452 Fifth Ave, New York, NY 10018/212-525-5000				
525	PERKIN-ELMER	530	564	587	9	564	PRIME COMPUTER	444	911	522	18	750	REXENE	688	345	814	4
	761 Main Ave, Norwalk, CT 06859/203-762-1000						Prime Pkwy, Natick, MA 01760/508-655-8000						126 East 56th St, New York, NY 10022/212-644-8200				
545	PETRIE STORES	523	753	700	8	543	PRIME MOTOR INNS	845	520	661	14	194	REYNOLDS METALS	143	96	271	16
	70 Enterprise Ave, Secaucus, NJ 07094/201-866-3600						700 Route 46 East, Fairfield, NJ 07007/201-882-1010						6601 West Broad St, Richmond, VA 23230/804-281-2000				
46	PFIZER	152	49	192	12	527	PRIMERICA	586	293	298	17	940	RIGGS NATIONAL	748	739	213	3
	235 East 42nd St, New York, NY 10017/212-573-2323						300 St. Paul Pl, Baltimore, MD 21202/301-332-3000						1503 Penn. Ave N.W., Wash, DC 20013/202-835-6000				
340	PHELPS DODGE	334	118	402	16	21	PROCTER & GAMBLE	20	28	97	6	397	RITE AID	291	438	565	12
	2600 North Central Ave, Phoenix, AZ 85004/602-234-8100						One P&G Plaza, Cincinnati, OH 45202/513-983-1100						Trindle & Railroad, Shiremanstown, PA 17011/717-761-2633				
736	PHH	418	867	319	23	592	PROGRESSIVE	524	404	438	17	12	RJR HABISCO	30	16	87	6
	11333 McCormick Rd, Hunt Valley, MD 21031/301-771-3600						6000 Parkland, Mayfield Heights, OH 44124/216-464-8000						300 Galleria Pkwy, Atlanta, GA 30339/404-852-3000				
138	PHILADELPHIA ELEC.	246	78	126	24	491	PROVIDENT LIFE	282	468	140	17	442	ROADWAY SERVICES	348	494	607	23
	2301 Market St, Philadelphia, PA 19101/215-841-4000						One Fountain Square, Chattanooga, TN 37402/615-755-1011						1077 Gorge Blvd, Akron, OH 44309/216-384-8184				
5	PHILIP MORRIS	13	8	80	6	621	PSI HOLDINGS	572	380	452	24	681	ROBINS (A. H.)	606	593	634	12
	120 Park Ave, New York, NY 10017/212-880-5000						1000 East Main St, Plainfield, IN 46168/317-839-9611						1407 Cummings Dr, Richmond, VA 23220/804-257-2000				
764	PHILIPS INDUSTRIES	631	667	832	15	480	PS OF COLORADO	430	358	380	24	774	ROCHESTER G&E	659	512	493	24
	4801 Springfield St, Dayton, OH 45401/513-253-7171						550 15th St, Denver, CO 80202/303-571-7511						89 East Ave, Rochester, NY 14649/716-546-2700				
88	PHILLIPS PETROLEUM	50	67	123	11	845	PS OF NEW MEXICO	655	474	413	24	674	ROCHESTER TEL.	798	631	694	22
	Fourth & Keeler, Bartlesville, OK 74004/918-661-6600						Alvarado Square, Albuquerque, NM 87158/505-768-6500						180 South Clinton Ave, Rochester, NY 14646/716-777-1000				
743	PIC 'N' SAVE	843	659	947	8	109	PUBLIC SERVICE ENT.	182	80	129	24	630	ROCKEFELLER CENTER	969	673	542	13
	2430 East Del Amo Blvd, Carson, CA 90749/213-537-9220						80 Park Plaza, Newark, NJ 07101/201-430-7000						1166 Ave of the Americas, NY, NY 10036/212-841-7760				
919	PIER 1 IMPORTS	851	884	917	6	958	PUGET SOUND BANC.	848	710	324	3	84	ROCKWELL INTL.	46	50	173	5
	301 Commerce St, Fort Worth, TX 76102/817-878-8000						1119 Pacific Ave, Tacoma, WA 98402/206-593-3600						2230 E. Imperial Hwy, El Segundo, CA 90245/213-647-5000				
429	PINNACLE WEST	468	930	109	24	495	PUGET SOUND POWER	656	353	420	24	258	ROHM & HAAS	310	222	442	4
	2828 North Central Ave, Phoenix, AZ 85004/602-234-1142						Puget Power Bldg, Bellevue, WA 98009/206-454-6363						Ind. Mall West, Philadelphia, PA 19105/215-592-3000				
453	PIONEER HI-BRED	633	580	665	10							725	ROHR INDUSTRIES	600	761	650	1
	400 Locust St, Des Moines, IA 50309/515-245-3500												Foot of H St, Chula Vista, CA 92012/619-691-4111				
168	PITNEY-BOWES	304	214	282	18							875	ROLLINS	856	842	975	21
	One Elmcraft Rd, Stamford, CT 06926/203-356-5000												2170 Piedmont Rd N.E., Atlanta, GA 30324/404-888-2000				
663	PITTSTON	446	740	663	11	142	QUAKER OATS	140	200	384	10	665	ROLLINS ENV.	937	826	949	21
	One Pickwick Plaza, Greenwich, CT 06836/203-622-0900						321 North Clark St, Chicago, IL 60610/312-222-7111						2200 Concord Pike, Wilmington, DE 19803/302-479-2700				
840	PITTTWAY	660	736	784	5	852	QUAKER STATE	630	908	733	11	425	RORER GROUP	574	574	568	12
	333 Skokie Blvd, Northbrook, IL 60065/312-498-1260						255 Elm St, Oil City, PA 16301/814-676-7676						500 Virginia Dr, Fort Washington, PA 19034/215-628-6000				
150	PNC FINANCIAL	208	111	28	3	437	QUANTUM CHEMICAL	273	142	389	4	957	ROSS STORES	714	830	933	8
	Fifth Ave & Wood St, Pittsburgh, PA 15265/412-762-2000						99 Park Ave, New York, NY 10016/212-949-5000						8333 Central Ave, Newark, CA 94560/415-790-4400				
184	POLAROID	405	960	472	14	707	QUESTAR	792	844	649	24	409	ROUSE	804	883	459	13
	549 Technology Sq, Cambridge, MA 02139/617-577-2000						180 East First South, Salt Lake City, UT 84147/801-534-5000						10275 L. Patuxent, Columbia, MD 21044/301-992-6000				
954	POLICY MANAGEMENT	931	875	915	17							859	ROWAN	932	967	717	11
	One PMS Center, Blythwood, SC 29016/803-735-4000												5051 Westheimer, Houston, TX 77056/713-621-7800				
502	PORTLAND GENERAL	664	396	424	24							978	RPM	868	858	923	13
	121 S.W. Salmon St, Portland, OR 97204/503-464-8000												2628 Pearl Rd, Medina, OH 44258/216-225-3192				
547	POTLATCH	557	387	561	7	90	RALSTON PURINA	122	136	312	10	282	RUBBERMAID	533	426	722	15
	One Maritime Plaza, San Francisco, CA 94111/415-576-8800						Checkerboard Square, St. Louis, MO 63164/314-982-1000						1147 Akron Rd, Wooster, OH 44691/216-264-6464				
300	POTOMAC ELECTRIC	492	242	315	24	863	RAMADA	763	929	652	14	589	RUSSELL	768	619	795	6
	1900 Penn. Ave N.W., Wash, DC 20068/202-872-2000						2390 East Camelback Rd, Phoenix, AZ 85016/602-273-4000						Lee St, Alexander City, AL 35010/205-329-4000				
103	PPG INDUSTRIES	139	99	266	13	428	RAYCHEM	551	418	609	9	279	RYDER SYSTEM	159	338	231	23
	One PPG Pl, Pittsburgh, PA 15272/412-434-3131						300 Constitution Dr, Menlo Park, CA 94025/415-361-3333						3600 N.W. 82nd Ave, Miami, FL 33166/305-593-3726				
796	PRECISION CASTPTS.	823	781	884	16	119	RAYTHEON	95	95	285	9						
	4600 S.E. Harney Dr, Portland, OR 97206/503-777-3881						141 Spring St, Lexington, MA 02173/617-862-6600										
464	PREMARK INTL.	325	370	521	5	383	REEBOK INTL.	419	328	639	6						
	1717 Deerfield Rd, Deerfield, IL 60015/312-405-6000						150 Royall St, Canton, MA 02021/617-821-2800										
478	PREMIER INDUSTRIAL	744	549	929	21	902	RELIANCE GROUP	213	855	164	17	332	SAFECO	265	217	190	17
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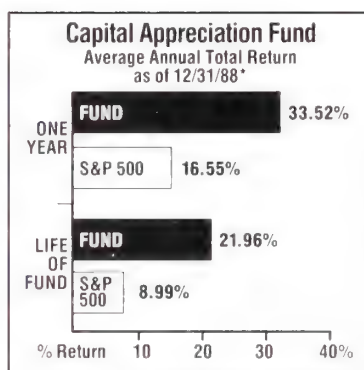
MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	

533	SAFETY-KLEEN	829	695	861	21
	777 Big Timber Rd, Elgin, IL 60123/312-697-8460				
172	SALOMON	120	193	9	17
	One New York Plaza, New York, NY 10004/212-747-7000				
271	SAN DIEGO G&E	369	264	346	24
	101 Ash St, San Diego, CA 92101/619-696-2000				
897	SAN JUAN BASIN	998	907	994	11
	500 Throckmorton, Fort Worth, TX 76102/817-338-8417				
170	SANTA FE SOUTHERN	251	311	209	23
	224 South Michigan Ave, Chicago, IL 60604/312-786-6000				
97	SARA LEE	51	134	245	10
	Three First National Plaza, Chicago, IL 60602/312-726-2600				
997	SAVANNAH FOODS	615	881	863	10
	2 East Bryan St, Savannah, GA 31401/912-234-1261				
440	SCANA	558	350	393	24
	1426 Main St, Columbia, SC 29201/803-748-3000				
63	SCECORP	119	46	98	24
	2244 Walnut Grove, Rosemead, CA 91770/818-302-1212				
60	SCHERING-PLOUGH	269	127	352	12
	One Giralda Farms, Madison, NJ 07940/201-822-7000				
49	SCHLUMBERGER	163	106	248	11
	277 Park Ave, New York, NY 10172/212-350-9400				
937	SCHULMAN (A.)	727	814	919	4
	3550 West Market St, Akron, OH 44313/216-666-3751				
989	SCIENTIFIC-ATLANTA	780	784	890	22
	One Technology Pkwy, Atlanta, GA 30348/404-441-4000				
191	SCOTT PAPER	172	123	265	19
	One Scott Plaza, Philadelphia, PA 19113/215-522-5000				
719	SCRIPPS HOWARD	912	899	776	20
	1100 Central Tr Twr, Cincinnati, OH 45202/513-977-3000				
366	SCRIPPS (E. W.)	525	535	539	20
	1409 Foulk Rd, Wilmington, DE 19803/302-478-4141				
782	SEAGATE TECHNOLOGY	491	948	671	18
	920 Disc Drive, Scotts Valley, CA 95066/408-438-6550				
939	SEALED AIR	877	835	931	15
	Park 80 Plaza East, Saddle Brook, NJ 07662/201-791-7600				
18	SEARS, ROEBUCK	6	34	14	8
	Sears Tower, Chicago, IL 60684/312-875-2500				
118	SECURITY PACIFIC	87	70	13	3
	333 South Hope St, Los Angeles, CA 90071/213-345-6211				
683	SEQUA	439	608	529	9
	200 Park Ave, New York, NY 10166/212-986-5500				
550	SERVICE CORP. INTL.	743	741	602	21
	1929 Allen Pkwy, Houston, TX 77019/713-522-5141				
703	SERVICE MDSE.	257	510	513	8
	2968 Foster Creighton, Nashville, TN 37204/615-251-6666				
692	SHAKLEE	719	825	855	6
	444 Market St, San Francisco, CA 94111/415-954-3000				
884	SHARED MEDICAL	859	802	918	18
	51 Valley Stream Pkwy, Malvern, PA 19355/215-296-6300				
933	SHAW INDUSTRIES	549	711	817	15
	616 East Walnut Ave, Dalton, GA 30720/404-278-3812				
299	SHAWMUT NATIONAL	284	211	51	3
	777 Main St, Hartford, CT 06115/203-728-2000				
317	SHEARSON LEHMAN	59	434	10	17
	Tower C World Fnci Ctr, New York, NY 10285/212-298-2000				
458	SHERWIN-WILLIAMS	390	423	590	13
	101 Prospect Ave N.W., Cleveland, OH 44115/216-566-2000				
792	SIERRA PACIFIC RES.	835	669	592	24
	6100 Neil Rd, Reno, NV 89511/702-689-3600				
457	SIGMA-ALDRICH	860	603	897	12
	3050 Spruce St, St. Louis, MO 63103/314-771-5765				

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*The fund is ranked #10 out of 1465 mutual funds for the 1 year period ended 12/31/88 by Lipper Analytical Services, Inc., a mutual fund performance monitor. Fund total returns are historical and include change in share price, reinvestment of dividends and capital gains, and the effect of its 2% sales charge and 1% redemption fee. Average annual total returns for more than 1 year assume a steady compounded rate of return and are not the fund's year-by-year results, which varied over the periods shown. Figures for the S&P 500 (a registered trademark of Standard & Poor's Corporation) an unmanaged index of common stock prices, include reinvestment of dividends.



ALPHABETICAL LIST OF COMPANIES

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE
AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT RANK	COMPANY	OTHER RANKINGS			IND NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
569	SIGNET BANKING	504	307	136	3	400	STANLEY WORKS	400	415	566	15	880	TCA CABLE TV	987	915	981	20
	7 North Eighth St., Richmond, VA 23219/804-747-2000						1000 Stanley Dr., New Britain, CT 06053/203-225-5111						3015 SSE Loop 323, Tyler, TX 75701/214-595-3701				
71	SMITHKLINE	170	225	273	12	516	STATE STREET BOSTON	619	447	174	3	804	TCBY ENTERPRISES	979	885	997	14
	16th & Race Sts., Philadelphia, PA 19101/215-751-4000						225 Franklin St., Boston, MA 02101/617-654-3000						425 West Capitol Ave., Little Rock, AR 72201/501-688-8229				
871	SMUCKER (J. M.)	871	829	958	10	517	STERLING CHEMICALS	680	228	902	4	415	TECO ENERGY	576	356	437	24
	Strawberry Lane, Orrville, OH 44667/216-682-0015						333 Clay St., Houston, TX 77002/713-650-3700						702 North Franklin St., Tampa, FL 33602/813-228-4111				
370	SNAP-ON TOOLS	637	384	758	15	316	STONE CONTAINER	212	152	427	7	585	TECUMSEH PRODUCTS	555	534	690	13
	2801 80th St., Kenosha, WI 53141/414-656-5200						150 North Michigan Ave., Chicago, IL 60601/312-346-6600						100 East Patterson St., Tecumseh, MI 49286/517-423-8411				
616	SOCIETY	596	424	148	3	746	STONE & WEBSTER	889	702	796	21	784	TEJON RANCH	1000	935	1000	10
	800 Superior Avenue, Cleveland, OH 44114/216-689-3000						250 West 34th St., New York, NY 10019/212-290-7500						4436 Lebec Rd., Lebec, CA 93243/805-327-8481				
430	SONAT	482	476	368	24	828	STORAGE TECH.	629	677	718	18	686	TEKTRONIX	471	953	657	9
	1900 Fifth Ave North, Birmingham, AL 35203/205-325-7410						2270 South 88th St., Louisville, CO 80028/303-673-5151						14150 S.W. Braun Dr., Beaverton, OR 97077/503-627-7111				
361	SONOCO PRODUCTS	442	435	667	7	776	STRATUS COMPUTER	914	803	960	18	682	TELECOM-USA	772	823	872	22
	One North Second St., Hartsville, SC 29550/803-383-7000						55 Fairbanks Blvd., Marlboro, MA 01752/508-460-2000						61 Perimeter Park N.E., Atlanta, GA 30341/404-458-4927				
710	SOTHEBY'S HOLDINGS	872	567	878	21	818	STRIDE RITE	858	758	938	6	986	TELECREDIT	955	938	991	17
	1334 York Ave., New York, NY 10021/212-606-7000						5 Cambridge Center, Cambridge, MA 02142/617-491-8800						6171 W. Century, Los Angeles, CA 90045/213-410-4600				
846	S. CAROLINA NATL.	753	616	258	3	907	STRYKER	949	903	986	12	144	TELEDYNE	176	125	269	5
	1426 Main St., Columbia, SC 29226/803-765-3000						420 Alcott St., Kalamazoo, MI 49001/616-381-3811						1901 Ave of the Stars, Los Angeles, CA 90067/213-277-3311				
615	SOUTHEAST BANKING	478	514	99	3	164	STUDENT LOAN MKTG.	350	232	49	17	996	TELEFLEX	888	851	940	15
	One Southeast Fndl Ctr., Miami, FL 33131/305-375-7500						1050 Jefferson St N.W., Wash, DC 20007/202-333-8000						155 South Limerick Rd., Limerick, PA 19468/215-948-5100				
54	SOUTHERN	109	38	68	24	894	SUMMIT BANCORP.	887	722	350	3	536	TELEPHONE & DATA	938	916	791	22
	64 Perimeter Center East, Atlanta, GA 30346/404-393-0650						367 Springfield Ave., Summit, NJ 07901/201-522-8400						79 West Monroe St., Chicago, IL 60603/312-630-1900				
974	SO. INDIANA G&E	896	726	748	24	151	SUN	67	923	124	11	406	TELERATE	820	449	801	17
	20 N W Fourth St., Evansville, IN 47741/812-424-6411						100 Matsonford Rd., Radnor, PA 19087/215-293-6000						One World Trade Center, New York, NY 10048/212-938-5200				
276	SO. NEW ENG. TEL.	447	303	373	22	167	SUN EXPLORATION	503	996	254	11	116	TELE-COMMUNS.	359	943	193	20
	227 Church St., New Haven, CT 06510/203-771-5200						5656 Blackwell, Dallas, TX 75231/214-890-6000						4643 South Ulster St., Denver, CO 80237/303-721-5500				
744	SOUTHTRUST	721	553	216	3	423	SUN MICROSYSTEMS	466	455	670	18	384	TEMPLE-INLAND	420	253	470	7
	420 North 20th St., Birmingham, AL 35203/205-254-5000						2550 Garcia Ave., Mountain View, CA 94043/415-960-1300						303 South Temple Dr., Daboll, TX 75941/409-829-5511				
606	SOUTHWEST AIRLINES	634	599	589	23	494	SUNDSTRAND	465	978	538	1	59	TENNECO	38	944	88	5
	8008 Aviation Pl., Dallas, TX 75235/214-902-1100						4949 Harrison Ave., Rockford, IL 61125/815-226-6000						1010 Milam, Houston, TX 77002/713-757-2131				
31	SOUTHWESTERN BELL	88	30	77	22	213	SUNTRUST BANKS	276	170	46	3	970	TERADYNE	803	945	848	9
	One Bell Center, St. Louis, MO 63101/314-235-9800						25 Park Pl N.E., Atlanta, GA 30303/404-588-7455						321 Harrison Ave., Boston, MA 02118/617-482-2700				
477	SOUTHWESTERN PS	657	409	519	24	322	SUPER VALU STORES	65	346	429	10	33	TEXACO	10	19	54	11
	600 Tyler, Amarillo, TX 79101/806-378-2121						11840 Valley View, Eden Prairie, MN 55344/612-828-4000						2000 Westchester, White Plains, NY 10650/914-253-4000				
283	SOVRAN FINANCIAL	343	210	66	3	983	SYMBOL TECHS.	980	873	979	18	806	TEXAS AIR	85	999	180	23
	One Commercial Pl., Norfolk, VA 23510/804-441-4000						116 Wilbur Pl., Bohemia, NY 11716/516-563-2400						333 Clay St., Houston, TX 77002/713-658-9588				
721	SPIEGEL	479	601	599	8	104	SYNTEX	495	163	554	12	214	TEXAS EASTERN	234	284	278	24
	1515 West 22nd St., Oak Brook, IL 60522/312-986-7500						3401 Hillview Ave., Palo Alto, CA 94304/415-855-5050						1221 McKinney St., Houston, TX 77010/713-759-3131				
655	SPRINGS INDUSTRIES	409	623	621	15	290	SYSCO	145	432	490	10	186	TEXAS INSTRUMENTS	118	138	302	9
	205 North White St., Fort Mill, SC 29715/803-547-3650						1390 Enclave Pkwy., Houston, TX 77077/713-584-1390						13500 N. Central Exy., Dallas, TX 75243/214-995-3333				
825	SPX	628	672	749	2	946	SYSTEMATICS	940	894	988	18	112	TEXAS UTILITIES	190	59	95	24
	100 Terrace Plaza, Muskegon, MI 49443/616-724-5000						4001 Parham Rd., Little Rock, AR 72212/501-223-5100						2001 Bryan Tower, Dallas, TX 75201/214-812-4600				
395	SQUARE D	433	376	578	9							250	TEXTRON	107	194	114	5
	1415 South Roselle, Palatine, IL 60067/312-397-2600												40 Westminster St., Providence, RI 02903/401-421-2800				
68	SQUIBB	307	115	372	12							955	THERMO ELECTRON	785	879	831	21
	Route 206, Princeton, NJ 08540/609-921-4000												101 First Ave., Waltham, MA 02254/617-622-1000				
755	ST. JUDE MEDICAL	972	769	977	12	650	3COM	899	804	948	18	591	THOMAS & BETTS	776	592	822	9
	One Lillehei Plaza, St. Paul, MN 55117/612-483-2000						3165 Kifer Rd., Santa Clara, CA 95052/408-562-6400						1001 Frontier Rd., Bridgewater, NJ 08807/201-685-1600				
263	ST. PAUL	216	149	143	17	407	TAMBRANDS	746	470	833	6	881	TIFFANY	908	840	968	8
	385 Washington St., St. Paul, MN 55102/612-221-7911						One Marcus Ave., Lake Success, NY 11042/516-358-8300						727 Fifth Ave., New York, NY 10022/212-755-8000				
777	STANDARD REGISTER	699	729	841	18	310	TANDEM COMPUTERS	472	421	580	18	66	TIME	177	185	293	20
	600 Albany St., Dayton, OH 45408/513-143-1000						19333 Vallico Pkwy., Cupertino, CA 95014/408-285-0000						Time/Life Bldg-Rockefeller Ctr., NY, NY 10020/212-522-1212				
797	STANHOME	795	700	922	6	145	TANDY	199	160	394	18	117	TIMES MIRROR	238	158	354	20
	333 Western Ave., Westfield, MA 01085/413-462-3631						1800 One Tandy Ctr., Ft Worth, TX 76102/817-390-3700						Times Mirror Square, Los Angeles, CA 90053/213-237-3700				

RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	
112	TIMKEN 1835 Dueber Ave S.W., Canton, OH 44706/216-438-3000	453	559	535	15
126	TJX One Mercer Rd, Natick, MA 01760/508-651-6000	396	469	728	8
103	TOPPS 254 36th St, Brooklyn, NY 11232/718-768-8900	945	854	993	20
126	TORCHMARK 2001 Third Ave South, Birmingham, AL 35233/205-325-2722	432	268	301	17
110	TOYS 'R' US 461 From Rd, Paramus, NJ 07652/201-262-7800	198	197	390	8
229	TRANSAMERICA 600 Montgomery St, San Francisco, CA 94111/415-983-4000	98	150	53	17
463	TRANSCO ENERGY 2800 Post Oak Blvd, Houston, TX 77056/713-439-2000	288	965	349	24
146	TRAVELERS One Tower Square, Hartford, CT 06183/203-277-0111	23	114	23	17
187	TRIBUNE 435 North Michigan Ave, Chicago, IL 60611/312-222-3232	331	243	385	20
715	TRINITY INDUSTRIES 2525 Stemmons Fwy, Dallas, TX 75207/214-631-4420	645	834	756	15
515	TRINOVA 1705 Indian Wood Circle, Maumee, OH 43537/419-891-2200	398	461	555	2
944	TRUSTCORP Three Seagate, Toledo, OH 43603/419-259-8598	747	937	234	3
218	TRW 1900 Richmond Rd, Cleveland, OH 44124/216-291-7000	112	199	299	5
454	TUCSON ELECTRIC 220 West Sixth St, Tucson, AZ 85702/602-623-7711	760	349	465	24
444	TURNER BDCSTG. One CNN Center, Atlanta, GA 30348/404-827-1500	649	986	494	20
368	TW SERVICES 605 Third Avenue, New York, NY 10158/212-972-4700	225	555	455	14
372	TYCO LABORATORIES Tyco Park, Exeter, NH 03833/603-778-9700	417	490	564	15
513	TYSON FOODS 2210 West Oaklawn, Springdale, AR 72764/501-756-4000	383	482	688	10

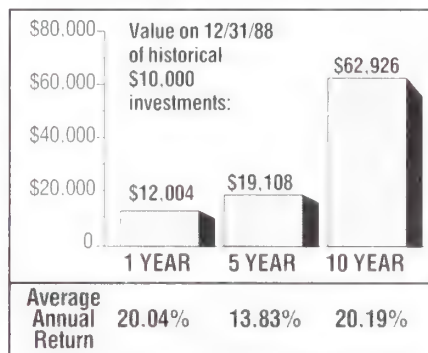
468	U. S. BANCORP 111 S.W. Fifth Ave, Portland, OR 97204/503-275-6111	484	364	104	3
570	U. S. CELLULAR 8410 West Bryn Mawr, Chicago, IL 60631/312-399-8900	999	949	992	22
977	U. S. HEALTHCARE 980 Jolly Rd, Blue Bell, PA 19422/215-628-4800	687	927	924	12
561	U. S. SHOE One Eastwood Dr, Cincinnati, OH 45227/513-527-7000	338	926	605	8
925	U. S. SURGICAL 150 Glover Ave, Norwalk, CT 06856/203-866-5050	907	860	927	12
892	U. S. TRUST 45 Wall St, New York, NY 10005/212-806-4500	867	794	374	3
227	UAL 1200 E. Algonquin, Elk Grove Vil, IL 60007/312-952-4000	82	74	219	23
601	UNION BANK 445 South Figueroa St, Los Angeles, CA 90071/213-236-5000	658	584	101	3
241	UNION CAMP 1600 Valley Rd, Wayne, NJ 07470/201-628-2000	303	180	371	19
132	UNION CARBIDE 39 Old Ridgebury Rd, Danbury, CT 06817/203-794-2000	90	61	171	4
239	UNION ELECTRIC 1901 Chouteau St, St. Louis, MO 63103/314-621-3222	375	182	240	24

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¹ Returns include change in share price, reinvestment of dividends and capital gains, and the effects of the 2% sales charge. Average annual returns for 5 and 10 years (periods of generally rising stock prices) assume a steady compounded rate of return and are not the Fund's year-by-year results, which varied.

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CODE: BW/EQU/041489



ALPHABETICAL LIST OF COMPANIES

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE
AMONG THE BUSINESS WEEK 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
53	UNION PACIFIC	121	81	117	23	82	UNITED TECHNOLOGIES	26	66	112	1	226	USF&G	142	172	115	17
	Eighth & Eaton Ave., Bethlehem, PA 18018/215-861-3200						United Technologies Bldg., Hartford, CT 06101/203-728-7000						100 Light St., Baltimore, MD 21202/301-547-3000				
481	UN. TEXAS PETROL.	544	398	511	11	93	UNITED TELECOMMS.	117	321	151	22	661	USLIFE CORP	507	550	318	17
	1330 Post Oak Blvd., Houston, TX 77056/713-623-6544						2330 Shawnee Mission, Westwood, KS 66205/913-676-3000						125 Maiden Lane, New York, NY 10038/212-709-6000				
126	UNISYS	69	64	130	18	949	UNITED TELEVISION	978	922	952	20	220	UST	725	292	780	6
	Township Line Rd., Blue Bell, PA 19422/215-542-4011						8501 Wilshire Blvd., Beverly Hills, CA 90211/213-854-0426						100 West Putnam Ave., Greenwich, CT 06830/203-661-1100				
408	UNITED ARTISTS	640	878	550	14	687	UNIVERSAL	298	568	617	6	50	USX	31	53	82	5
	2930 East Third Ave., Denver, CO 80206/303-321-4242						1501 North Hamilton St., Richmond, VA 23230/804-359-9311						600 Grant St., Pittsburgh, PA 15219/412-433-1121				
734	UNITED BRANDS	231	582	552	10	767	UNIVERSAL FOODS	685	798	839	10	935	UTILICORP UNITED	701	706	660	24
	250 East Fifth St., Cincinnati, OH 45202/513-784-8000						433 East Michigan St., Milwaukee, WI 53202/414-271-6755						911 Main St., Kansas City, MO 64105/816-421-6600				
348	UNITED CABLE TV	910	940	711	20	105	UNOCAL	77	852	157	11						
	4700 S. Syracuse Pkwy., Denver, CO 80237/303-779-5999						1201 West Fifth St., Los Angeles, CA 90017/213-977-7600										
984	UN. ILLUMINATING	775	500	431	24	417	UNUM	346	347	183	17						
	40 Temple Street, New Haven, CT 06506/203-787-7200						2211 Congress St., Portland, ME 04122/207-720-2211										
758	UNITED INVESTORS	911	699	767	17	92	UPJOHN	290	146	366	12	363	VALHI	342	493	440	5
	2001 Third Ave South, Birmingham, AL 35233/205-325-2722						7000 Portage Rd., Kalamazoo, MI 49001/616-323-4000						5430 LBJ Fwy, Suite 1700, Dallas, TX 75240/214-386-4110				
530	UN. JERSEY BANKS	577	381	137	3	40	US WEST	76	27	67	22	787	VALLEY NATIONAL	545	569	128	3
	301 Carnegie Center, Princeton, NJ 08543/609-987-3200						7800 East Orchard Rd., Englewood, CO 80111/303-793-6500						241 North Central Ave., Phoenix, AZ 85004/602-261-2900				
967	UNITED MISSOURI	882	763	335	3	339	US WEST NEWVECTOR	965	963	904	22	761	VANGUARD CELLULAR	996	964	978	22
	1010 Grand Ave., Kansas City, MO 64106/816-556-7000						3350 161st Ave S.E., Bellevue, WA 98008/206-747-4900						3101 North Elm St., Greensboro, NC 27406/919-282-3690				
936	UNITED STATIONERS	621	845	867	21	338	USAIR GROUP	135	285	251	23	772	VARIAN ASSOCIATES	534	614	696	9
	2200 East Golf Rd., Des Plaines, IL 60016/312-699-5000						2345 Crystal Park Four, Arlington, VA 22227/703-418-7000						611 Hansen Way, Palo Alto, CA 94303/415-493-4000				

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He knew then, after the music, the dancing, and the long, long, conversations over B&B, tha

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
000	VERMONT AMERICAN	886	901	941	15	208	WASHINGTON POST	487	195	560	20	96	WEYERHAEUSER	66	79	100	19
	100 East Liberty St, Louisville, KY 40202/502-587-6851						1150 15th St N.W., Washington, DC 20071/202-334-6000						Tacoma, WA 98477/206-924-2345				
253	VF	312	277	504	6	716	WASHINGTON WATER	761	527	570	24	448	WHEELABRATOR TECH.	528	691	608	21
	1047 North Park Rd, Wyomissing, PA 19610/215-378-1151						East 1411 Mission Ave, Spokane, WA 99202/509-489-0500						55 Ferncroft Rd, Danvers, MA 01923/508-777-2207				
268	VIACOM	515	989	323	20	43	WASTE MANAGEMENT	227	101	277	21	305	WHIRLPOOL	181	295	353	6
	1211 Ave of the Americas, NY, NY 10036/212-575-5175						3003 Butterfield Rd, Oak Brook, IL 60521/312-572-8800						2000 M-63, Benton Harbor, MI 49022/616-926-5000				
593	VISTA CHEMICAL	654	365	821	4	965	WATTS INDUSTRIES	935	865	951	15	171	WHITMAN	222	274	320	5
	15990 N. Barker's, Houston, TX 77224/713-531-3200						815 Chestnut St, North Andover, MA 01845/508-688-1811						111 East Wacker Dr, Chicago, IL 60601/312-565-3000				
759	VONS	204	961	528	10	963	WEINGARTEN REALTY	989	868	879	13	920	WICKES	201	975	326	5
	10150 Lower Azusa Rd, El Monte, CA 91731/818-579-1400						2600 Citadel Plaza Dr, Houston, TX 77292/713-866-6000						3340 Ocean Park, Santa Monica, CA 90405/213-452-0161				
324	VULCAN MATERIALS	568	329	676	13	402	WEIS MARKETS	536	485	782	10	450	WILLAMETTE INDS.	425	296	556	19
	One Metroplex Dr, Birmingham, AL 35209/205-877-3000						1000 South Second St, Sunbury, PA 17801/717-286-4571						3800 1st Interstate Twr, Portland, OR 97201/503-227-5581				
						711	WELLMAN	894	732	939	4	441	WILLIAMS	431	946	342	24
							1040 Broad St, Shrewsbury, NJ 07702/201-388-0120						One Williams Center, Tulsa, OK 74172/918-588-2000				
						157	WELLS FARGO	164	87	26	3	883	WILLIAMS (A. L.)	844	437	785	17
							420 Montgomery St, San Francisco, CA 94163/415-477-1234						3100 Breckinridge Blvd, Duluth, GA 30136/404-381-1674				
262	WALGREEN	160	336	525	12	723	WENDY'S INTL.	564	817	731	14	733	WILMINGTON TRUST	895	627	381	3
	200 Wilmot Rd, Deerfield, IL 60015/312-940-2500						4288 W. Dub-Granv. Rd, Dublin, OH 43017/614-764-3100						Rodney Square North, Wilmington, DE 19890/302-651-1000				
808	WALLACE COMPUTER	838	766	903	18	341	WESTPOINT-PEPPERELL	328	501	432	15	318	WINN-DIXIE STORES	78	352	526	10
	4600 West Roosevelt Rd, Hillside, IL 60162/312-449-8600						400 West 10th St, West Point, GA 31833/404-645-4000						5050 Edgewood Court, Jacksonville, FL 32205/904-783-5000				
15	WAL-MART STORES	19	42	204	8	999	WESTERN DIGITAL	595	649	779	18	333	WISCONSIN ENERGY	455	265	400	24
	702 S.W. Eighth, Bentonville, AR 72716/501-273-4000						2445 McCabe Way, Irvine, CA 92714/714-474-2033						231 West Michigan St, Milwaukee, WI 53201/414-221-2345				
382	WANG LABORATORIES	258	634	388	18	960	WESTERN PUBLISHING	759	809	875	20	826	WISCONSIN PS	736	604	662	24
	One Industrial Ave, Lowell, MA 01851/508-459-5000						444 Madison Ave, New York, NY 10022/212-688-4500						700 North Adams St, Green Bay, WI 54301/414-433-1598				
79	WARNER COMMUNS.	189	117	314	14	51	WESTINGHOUSE	42	45	91	9	573	WITCO	445	526	622	4
	75 Rockefeller Plaza, New York, NY 10019/212-484-8000						11 Stanwix St, Pittsburgh, PA 15222/412-244-2000						520 Madison Ave, New York, NY 10022/212-605-3800				
91	WARNER-LAMBERT	205	154	405	12	308	WESTVACO	347	240	408	19	179	WOOLWORTH (F. W.)	96	187	325	8
	201 Tabor Rd, Morris Plains, NJ 07950/201-540-2000						299 Park Ave, New York, NY 10171/212-688-5000						233 Broadway, New York, NY 10279/212-553-2000				
842	WASHINGTON GAS	694	671	686	24	742	WETTERAU	165	698	656	10	554	WORTHINGTON INDS.	599	578	813	16
	1100 H St N.W., Washington, DC 20080/703-750-4440						8920 Pershall Rd, Hazelwood, MO 63042/314-524-5000						1205 Dearborn Dr, Columbus, OH 43085/614-438-3210				



Some nights you
don't want to end.
And there is an
art to moments like
these called the art of
lingering.

An art which
achieves its finest ex-
pression with great
friends, great conver-
sation and the greatest
of all liqueurs.

B&B.

An exquisite blend
of 27 exotic herbs and
spices artfully balanced
with the finest French
cognac.



The art of lingering.

would be virtually impossible for him to live without her for more than two consecutive days.

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ALPHABETICAL LIST

THE NUMBER TO THE LEFT OF THE COMPANY'S NAME IDENTIFIES ITS RANK IN MARKET VALUE AMONG THE TOP 1000. FOR EXPLANATION OF OTHER RANKINGS, SEE PAGE 273

MKT. RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS	

717	WPL HOLDINGS	737	575	648	24
222 W. Washington, Madison, WI 53703/608-252-3311					

378	WRIGLEY (WM.) JR.	623	463	844	10
410 North Michigan Ave., Chicago, IL 60611/312-644-2121					

X

76	XEROX	34	130	119	18
800 Long Ridge Rd., Stamford, CT 06904/203-329-8700					

Y

581	YELLOW FREIGHT	379	546	651	23
10990 Roe Ave., Overland Park, KS 66207/913-345-3000					

Z

389	ZAYRE	397	612	485	8
270 Cochituate Rd., Framingham, MA 01701/508-390-1000					

819	ZENITH ELECTRONICS	300	925	558	18
1000 Milwaukee Ave., Glenview, IL 60025/312-391-7000					

924	ZENITH NATL. INS.	781	668	659	17
21255 Califa St., Woodland Hills, CA 91367/818-713-1000					

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THE TIME IS RIGHT

It's not that the usual benchmarks are invalid.

It's just that Audi prefers to set the bar a bit higher. To satisfy our own stringent standards. To pursue, in other words, an alternate route.

And should you think the difference is all in our head, consider our body. It's 100% galvanized steel. Inside and outside.

Unusual? Let's just say Audi is the first and only car maker to offer a full line of fully galvanized sedans. The result? An Audi resists rust as resolutely as it resists convention.

Even more remarkable, our engineers employ a zinc coating that reduces the potential corrosion of everyday nicks and scrapes via



Not unlike your own skin, Audi's remarkable galvanized body can actually heal itself.

It Sets The Standard By Ignoring It.

The 100/200 Luxury Sedans.



cathodic effect." Which is a fancy way of saying it actually heals itself.

But then, a body like ours deserves no less. Because the Audi 200/200 Series is the latest evolution of a sedan design cited as "the new styling standard for cars of this class" (*Motor Trend*).

To which *Road & Track* added this clarification: "Audis are innovative automobiles, their identity based not on a familiar grille shape, styling theme or dizzying performance but on a penchant for representing the state of the technical art."

And since every Audi comes with the powerful protection of the Audi Advantage (your dealer will proudly share the impressive details), you'll also enjoy an unprecedented standard of security.



Which is the only standard we know. **The Alternate Route.**



HE MAY NOT BE COVERED PROPERLY.



Suppose this statue had to be shipped to another location.

What would happen if it was damaged in transit?

Chances are the insured would discover the statue was missing something very important. Namely, thousands of dollars in coverage.

Because while certain policies may protect your property while it's on your premises, after it leaves, it could be stripped of virtually all protection.

With property and casualty needs becoming increasingly complex, it's not surprising that businesses are often unaware of gaps in their insurance programs. Last year, American businesses let millions of dollars slip through those gaps. Which is why at CIGNA, we're constantly developing ways to reduce them.

One way is with our business package policy. An exceptional policy we invented and sell more of than anyone else. It enables us to tailor specific coverages

and build them around the needs of your business. Coverages designed to close gaps. Like our transportation coverage, which would guarantee payment for a loss, even when the shipper of the statue isn't liable.

Furthermore, at the CIGNA Companies, we offer an array of business insurance products rarely available from a single insurer. All backed by strong claims service, experienced loss control specialists and one of the most advanced computerized risk-information systems in the industry.

Without the proper coverage, you could expose yourself to numerous unnecessary risks. Call your CIGNA company agent, check your local listings or write CIGNA Companies, Dept. R16, 1600 Arch Street, Phila., PA 19103 and learn how we can help fill in the missing pieces of your program.

CIGNA

BusinessWeek

MAY 1, 1989

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\$2.00

EXECUTIVE PAY

Who Made
The Most...

...And Are They
Worth It?

1988 TOP TEN



2
\$32,185,000
Frank G. Wells
Walt Disney



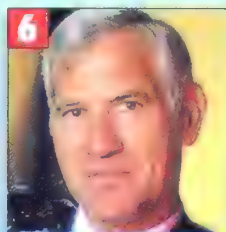
3
\$21,730,000
Edward A. Horrigan Jr.
RJR Nabisco



4
\$21,071,000
F. Ross Johnson
RJR Nabisco



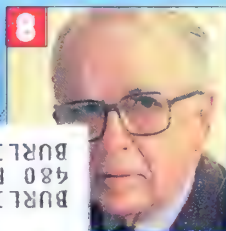
5
\$18,230,000
Martin S. Davis
Gulf & Western



6
\$14,053,000
Richard L. Gelb
Bristol-Myers



7
\$12,940,000
William P. Stiritz
Ralston Purina



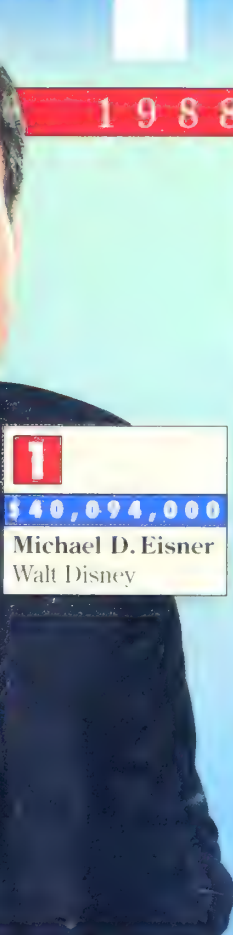
8
\$11,545,000
J. P. Kerr
Pennzoil



9
\$11,236,000
J. Hugh Liedtke
Pennzoil



10
\$11,439,000
Paul Fireman
Reebok International



1
\$40,094,000
Michael D. Eisner
Walt Disney

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J. P. Kerr
Pennzoil

J. Hugh Liedtke
Pennzoil

Paul Fireman
Reebok International

About three years ago, to preserve a local landmark, Eastman Kodak Company bought an empty, 107-year-old seminary, just a stone's throw from their largest manufacturing site in Rochester, New York.

Window of opportunity.

Soon afterward, they decided to put a research and development unit into the top floor. The problem was, there was no effective way to get anything bigger than a seminary student into the building. No loading docks. No elevators. And three-story stairwells too twisty to hike any furniture up.

So, Kodak called on John Donohue of Merkel-Donohue, their full-service Steelcase® dealer in Rochester, with 70 employees and 25-years' experience. Donohue and the Kodak people put their heads together.

"John, it's going to be a challenge."



“Challenge?
We’re going to
need a shoehorn!”



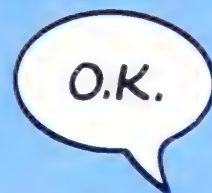
The best approach, they decided, was to jury-rig an outside elevator. They took out a third-story bay window. Built a scaffold. And rolled a giant crane over from Kodak. Steelcase’s deliveries were coordinated so that as furniture arrived, it was unloaded, hoisted up to the scaffold, and moved in through the window.

Working together, Merkel-Donohue, Kodak, and Steelcase managed to deliver three huge trailers’ worth of furniture—Series 9000, plus chairs, files, the works. Enough for 40 offices and several conference rooms. In one day.

One long, late-November day.

In a blizzard.





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SAA is a set of standards that finally allows for integration of computer systems.

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By harnessing the power of cooperative processing, BrightView allows intelligent work stations to be something they never truly were before: intelligent. It does this by unleashing the power and potential within the work station, freeing you from dependence on valuable mainframe time, and dramatically increasing the efficiency of all application users.

This efficiency is further heightened by BrightView's CUA compliance, which yields a friendly, consistent look and feel to work stations, maximizing your investment in personnel and hardware. All of which makes it a rather brilliant idea to call Robert Carpenter at 404-239-2000.

IBM believes SAA is the future. We recommend our software to anyone intending to spend some time there.

MSA

The Software Company

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SWITCH TO CONSORT! FREE TRAVEL SIZE OFFER

If you already use a competing hairspray brand, you can receive a free Consort Travel Size Aerosol or Pump hairspray and a \$1.00 coupon (good towards your first full size purchase of Consort) by following the instructions below.

To receive your free Consort Aerosol or Pump hairspray, please mail the following:

- 1) This completed certificate.
- 2) The proof-of-purchase from any competing men's or women's hairspray brand.

Proof-of-Purchase Requirements:
Please submit the following proof-of-purchase from the competing brands below.

Dry Look Pump—"We've Got Your Style" sticker from cap.

Dry Look Aerosol—"We've Got Your Style" sticker from cap.

Vitalis Pump—Peel off UPC from back of bottle.

Final Net—Tear off UPC from bottom of box.

All Other Brands—Trace brand name off package onto a piece of paper.

My current brand is: _____

The UPC Code number on the back of the package is: _____

must be provided

Please send me a Travel Size: (Check one)

CONSORT PUMP

01 Regular ☐

02 Extra Hold ☐

CONSORT AEROSOL

03 Regular ☐

04 Extra Hold ☐

05 Unscented ☐

Please Print:

Name _____

Address _____

City/State _____

Zip Code _____

NOTE: You must be a user of a competing hair care brand to participate in this mail-in offer. Limit one coupon per person per address. P.O. boxes honored. But you must also provide a street address. Offer not available to clubs or organizations. This coupon may not be mechanically reproduced. This certificate cannot be redeemed at retail outlets. Offer good only in the USA. Void where prohibited by law. Not responsible for lost or misdirected submissions. Formula request will be substituted if available. Allow 8 weeks for delivery. Expiration date 9/30/89. B-1143

3) Send To: Consort Switch Offer
P.O. Box B-1143
Young America, MN
55394-1143



F. ROSS JOHNSON'S \$53 MILLION BROKE THE GOLDEN PARACHUTE RECORD, WHILE AVERAGE TOTAL COMPENSATION FOR CEOs CLIMBED 14%.

Cover Story

46 EXECUTIVE PAY

For the first time, chief executives took home an average of more than \$2 million in total compensation. As the chasm between their income and that of managers and professionals widens, critics claim that rewards outweigh the performance of most CEOs. Is the boss paid too much?

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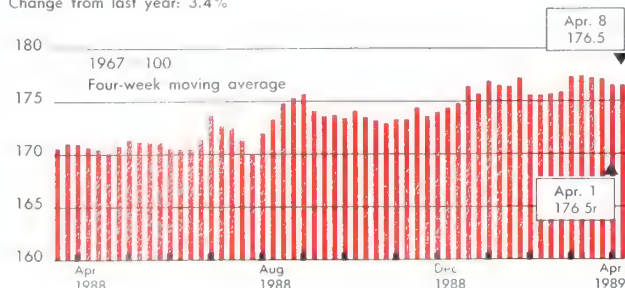
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BusinessWeek Index

PRODUCTION

Change from last week: 0.0%
Change from last year: 3.4%

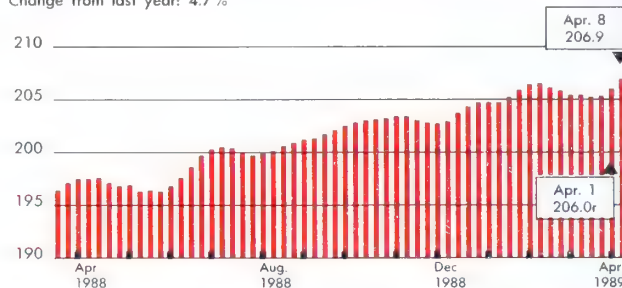


The production index was unchanged for the week ended Apr. 8. On a seasonally adjusted basis, production of autos, trucks, electric power, lumber, steel, paper, and coal posted increases. Crude-oil refining declined, and rail-freight traffic and paperboard output were unchanged for the week. Before calculation of the four-week moving average, the index increased to 177.7 from 175.4 in the previous week when Easter closings may have affected some production data.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.4%
Change from last year: 4.7%



The leading index advanced during the week ended Apr. 8. Sharply higher stock prices, lower bond yields, and faster growth rates for both M2 and real estate loans contributed to the increase. These positive economic indicators offset a smaller increase in materials prices and a hike in the number of business failures. Prior to calculation of the four-week moving average, the index rose to 208.5 from 207.8 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/15) thous. of net tons	2,053	2,029 #	3.6
AUTOS (4/15) units	160,652	159,295r #	1.3
TRUCKS (4/15) units	86,976	90,761r #	0.3
ELECTRIC POWER (4/15) millions of kilowatt-hours	50,653	50,692 #	6.2
CRUDE-OIL REFINING (4/15) thous. of bbl./day	13,040	12,998 #	-1.0
COAL (4/8) thous. of net tons	18,791 #	19,318	6.4
PAPERBOARD (4/8) thous. of tons	758.5 #	770.8r	4.4
PAPER (4/8) thous. of tons	755.0 #	756.0r	1.3
LUMBER (4/8) millions of ft.	485.3 #	482.6	-8.8
RAIL FREIGHT (4/8) billions of ton-miles	19.7 #	19.9	6.5

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/19)	132	133	124
GERMAN MARK (4/19)	1.86	1.89	1.66
BRITISH POUND (4/19)	1.71	1.69	1.88
FRENCH FRANC (4/19)	6.30	6.37	5.64
CANADIAN DOLLAR (4/19)	1.19	1.19	1.23
SWISS FRANC (4/19)	1.64	1.67	1.37
MEXICAN PESO (4/19) ³	2,420	2,406	2,315

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/19) \$/troy oz.	383.900	387.250	-16.1
STEEL SCRAP (4/18) # 1 heavy, \$/ton	116.50	115.50	-2.1
FOODSTUFFS (4/17) index, 1967 = 100	226.1	224.1	4.1
COPPER (4/15) ¢/lb.	146.3	135.7	41.2
ALUMINUM (4/15) ¢/lb.	97.0	93.5	-12.5
WHEAT (4/15) # 2 hard, \$/bu.	4.40	4.38	38.4
COTTON (4/15) strict low middling 1-1/16 in., ¢/lb.	61.68	59.51	2.5

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/14) S&P 500	298.47	296.08	12.0
CORPORATE BOND YIELD, Aaa (4/14)	9.80%	9.81%	2.0
INDUSTRIAL MATERIALS PRICES (4/14)	105.6	104.9	6.9
BUSINESS FAILURES (4/7)	236	228	-18.9
REAL ESTATE LOANS (4/5) billions	\$318.4	\$317.6r	14.0
MONEY SUPPLY, M2 (4/3) billions	\$3,093.4	\$3,088.8r	3.7
INITIAL CLAIMS, UNEMPLOYMENT (4/1) thous.	318	317	8.2

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980 = 100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
CONSUMER PRICE INDEX (Mar.)	122.3	121.6	5.0
REAL GROSS WEEKLY PAY (Mar.)	\$165.95	\$166.09r	-0.8
HOUSING STARTS (Mar.) annual rate, thous.	1,397	1,476r	-8.6
INDUSTRIAL PRODUCTION (Mar.) total index	141.0	141.0r	4.7

Sources: BLS, Commerce Dept., Federal Reserve

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/3)	\$781.1	\$787.2r	2.1
BANKS' BUSINESS LOANS (4/5)	313.3	311.3r	3.8
FREE RESERVES (4/5)	844r	319r	NM
NONFINANCIAL COMMERCIAL PAPER (4/5)	112.3	111.6	30.6

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (4/18)	9.71%	9.79%	6.93%
PRIME (4/19)	11.50	11.50	8.50
COMMERCIAL PAPER 3-MONTH (4/19)	9.73	9.88	6.88
CERTIFICATES OF DEPOSIT 3-MONTH (4/19)	9.80	10.05	6.97
EURODOLLAR 3-MONTH (4/12)	10.14	10.14	6.99

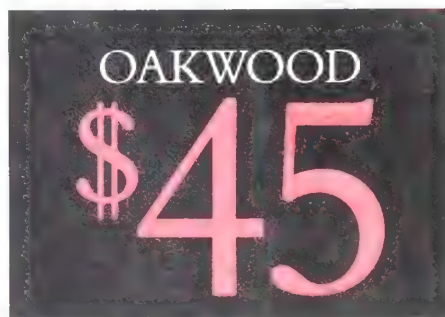
Sources: Federal Reserve Board, First Boston

The Fortunate 300 Of The Fortune 500[®] Stay At The Un-Hotel.



These fortunate 300 didn't get where they are today by making bad decisions. They got there by knowing a good value when they see it, by sticking with a proven product, and by making life easier for their people on the move.

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all the amenities you'd expect to find at a resort hotel.

Living at the Un-Hotel doesn't automatically guarantee acceptance into the Fortune 500[®], but it's a start. The next time your people need a home away from home for 30 days or longer, call the Un-Hotel at (800) 421-6654. It just might be the smartest call you'll ever make.

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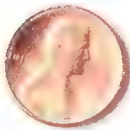
Prices quoted are average costs per night for 30-day stays throughout Oakwood's network of more than 60 locations nationwide including: Alexandria, VA; Atlanta, GA; Austin, TX; Chicago, IL; Coronado, CA; Denver, CO; Garden Grove, CA; Houston, TX; Huntington Beach, CA; Las Vegas, NV; Long Beach, CA; Los Angeles, CA; Marina Del Rey, CA; Mountain View, CA; Newport Beach, CA; Palmdale, CA; Pomona, CA; Raleigh, NC; San Diego, CA; San Francisco, CA; San Jose, CA; Sherman Oaks, CA; Toluca Lake, CA; Torrance, CA; Upland, CA; Van Nuys, CA; Woodland Hills, CA

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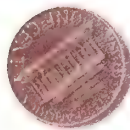
For 61 cents a day, here's what GTE's new



You'll have the satisfaction of getting more features—there are 13 in GTE's CentraNet 1000 package—at less cost than ever before.



You'll have an advanced, highly efficient business communications system, without having switching equipment on your premises.



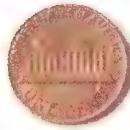
Each month, you'll be able to check how much each station's phone calls cost you.



Thanks to individual station billing, you'll be able to ask the new employee about all those calls to New York—at your expense.



24 hours a day, 365 days a year, GTE's computerized, self-diagnostic systems will work to keep things running smoothly.



If something should go wrong, the chances are we'll have it fixed before you even notice it.



You'll be able to tell by the sound of the ring whether a call is coming from across the hall or across the country.



You'll have a business phone system that can grow with you: GTE's CentraNet 2000 and 3000 packages offer even more sophisticated features.



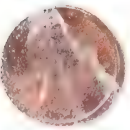
Your communications will have the quality you'd expect from GTE's advanced network.



GTE's CentraNet service means that you'll be able to schedule changes months in advance, or as soon as this morning.



If the lights should go out, your telephone service will stay on.



When Burt in Bakersfield won't get off the phone, that important call from Encino will go automatically to your secretary.



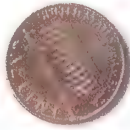
Your speed dialing feature will remember the eight numbers you call most often.



You may be able to beat someone to the best table at Mario's, because you only have punch in two numbers, not the usual seven.



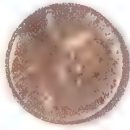
GTE's CentraNet service will turn the regular touchtone phones you already own into highly sophisticated business tools.



Your small branch offices will be able to have the same telephone features as your big home office.



You may be able to breathe new life into your aging key system, without having to buy yet more expensive equipment.



If Deborah needs a phone that has more features, you'll be able to give it to her without having to give the same features to John, Linda, Michael and Melissa.



You'll be able to add lines by making just one phone call to a GTE Account Executive.



You'll be able to delete lines by making just one phone call to a GTE Account Executive.



You'll probably pay less for your fire and theft insurance, since you won't have any costly switching equipment to insure.



You may be able to catch Doug before he leaves for lunch, because like everyone, he'll have his own direct line.



If you land a big contract, CentraNet can offer more than congratulations: our optional features range from 8-party conferencing to automatic call distribution.



You'll be able to answer the phone in your partner's office without even leaving your chair.

CentraNet[®] can do for your business phone.



You'll see a lot less of your phone repairer, since the switching equipment is monitored and maintained on GTE's premises, not yours.



You'll probably be able to tear up that oh-so-expensive service contract.



You'll have an extra office or storeroom, instead of a room that's packed full of telecommunications equipment.



You'll be able to impress your business associates with "Excuse me, I have another call on this line." (They'll be even *more* impressed if they happen to be the other call.)



Your company can expect to save a bundle in trunk charges. There aren't any.



Your switching equipment isn't going to need air conditioning in summer (remember, you don't have any switching equipment).



Your switching equipment isn't going to need heating in winter (ditto).



CentraNet can save a business with 160 lines \$51,450 in five years, compared to a PBX system. (Ask your GTE Account Executive to explain the assumptions behind these numbers.)



You'll be able to transfer calls without needing a master's degree in telecommunications.



You'll have the most advanced business phone system of 1989. And 1990, 1991, 1992... the point is, as soon as we get new technology, so do you.



You'll only need to hit four numbers, to find out what's going on in the Sacramento office.



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If you're an accountant, you'll be able to cope with the usual overload in April, without having spare capacity in September.



Same for ski operators after the first snowfall, fireworks manufacturers on the Fourth, florists' shops on Valentine's Day.



You can change your mind about the features you need, and not have to change \$20,000 worth of equipment.



Installation won't mean weeks of hassle and headaches. If the wiring's already in place, all it often takes is a phone call.



With CentraNet's station hunting feature, incoming calls can be automatically routed to ring phones that aren't busy.



You can find out who in your company uses which features, when and how often.



You'll be able to invest the capital you don't spend on phone equipment on something else that your business really needs.



You'll be able to brainstorm with Jack (in Detroit) and Jacqueline (in Delaware) simultaneously, thanks to 3-way conferencing.



When you're talking to Ed, and Bill calls, you can answer him, buzz Brian, tell Bill what Brian said, then get back to Ed.



You'll sound like a million dollar corporation, even if you're just a two-person company.



We could go on, but it might be better to call 1-800-325-6844, and speak to a GTE Account Executive. Just say you'd like their two cents' worth on what CentraNet can do for you.



THE POWER IS ON

DONALD TRUMP
AMERICA'S BILLIONAIRE
PAGE 16

COMPUTERS: HOW LONG CAN DEC KEEP FLYING HIGH? PAGE 18

A MCGRAW-HILL PUBLICATION

GLOBAL PROFITS

How 1,000
companies in
60 countries
did in 1986

PAGE 30



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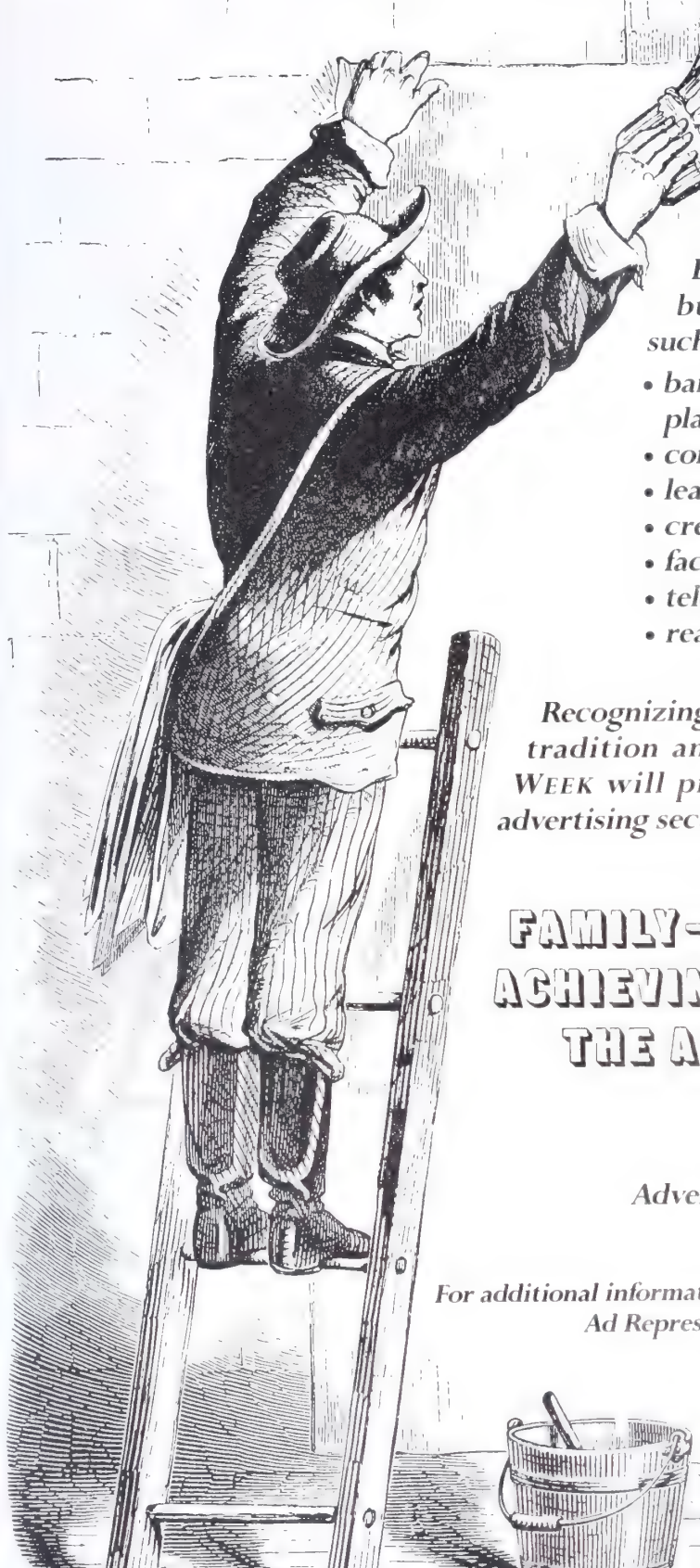
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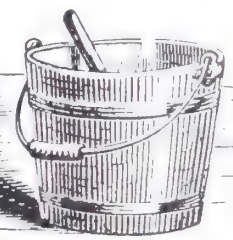
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Readers Report

more time with their children or elect part-time work, without jeopardizing their career.

Elizabeth J. Cezat
Plymouth, Mich.

The controversy surrounding the mommy track is misleading in treating part-time work as solely a women's issue. As co-founder of an employment service that specializes in the placement of middle- and upper-level staff in part-time situations, every day I see the true breadth and diversity of this segment of the work force.

A substantial 40% of our candidate data base is composed of men. And career/family conflict is only one of many reasons that individuals are seeking alternative work options. Other factors cited include early retirement, graduate studies, and a variety of other pursuits.

The fact that the issue of flexible schedules transcends any special interest group will be the real driving force in gaining corporate acceptance. Unless employers find a way to provide for part-time work without permanently derailing career paths, the pool of candidates eligible for upper management will be greatly reduced. In addition, in

today's tight employment market, companies that fail to accommodate flexible scheduling will be at a disadvantage in the competition for executive talent.

Kim L. Sommer
Vice-President
Pickwick Group Inc.
Wellesley Hills, Mass.

WHERE MITEL STANDS IN THE PBX MARKET

'Dealmakers are burning up the phone lines" (Special Report, Mar. 13) was inaccurate and potentially damaging. You state: "Buying Mitel Inc., the fifth-largest supplier of PBXs, hasn't helped much, either. The powerful Siemens-ROLM combination couldn't have come at a worse time for Kanata (Ont.)-based Mitel, which is losing market share and money." The facts:

- In 1986, British Telecom PLC bought 51% of Mitel Corp., of which Mitel Inc.—our U.S. operation—is a subsidiary.
- Mitel's U.S. market share as of September, 1988, was 10.4% (source: Dataquest Inc.)—hardly a reduction compared with 9.9% in 1987.
- Our market share in Canada increased from 24% in 1987 to 28% in 1988 (source:

NBI). With gains also in Europe, we are hardly losing market share.

■ We have held fourth place overall, not fifth, in the U.S. PBX market against much bigger competitors—AT&T, Siemens, Northern Telecom—since the early 1980s, while being first in the small-systems segment (below 100 lines) for the same period.

■ [In the third quarter] we generated a net income of \$14.7 million (Canadian) on sales \$10 million higher than the comparable period the previous year.

The markets, as your report rightly points out, are extremely competitive. Although our profit position is the first such positive result for five years, the real situation as delineated above is rather different from the one you describe.

John E. Jarvis
President & CEO
Mitel Corp.
Kanata, Ont.

Editor's note: Mitel's reported profits for its third quarter and the nine months ended Dec. 31, 1988, included extraordinary gains and tax-loss carryforwards. On an operating basis, the company lost money for both periods. The Dataquest data cited show



at, for the year as a whole, Mitel's S. market share declined in 1988 to 3% from 9.9% in 1987.

Although Dataquest did rank the company fourth for 1988, NBI/Datapro ranked it fifth for both 1988 and 1987.

ONING OUT IE SITUATION AT WEIRTON

Our article "Has Weirton's ESOP worked too well?" (The Corporation, Jan. 23) in some respects provided a good insight into the problems now faced by a large pioneer ESOP. There are, however, certain gross inaccuracies at I wish to correct.

At no time did any of the Weirton Steel Corp. board members indicate to me disagreement with my focus on establishing an employee-participation program and building good relations with the Independent Steelworkers Union and its members. To the contrary, the board is supportive, and rightly so.

I did indeed spend a portion of my time on employee communications and attend frequent in-plant meetings. I fully believe that a communications program cannot be successful without the personal involvement of the CEO. We do have a telephone hot line, and I re-

ceived and read transcripts of every call as well as the responses. It was a hard-and-fast rule that each call had to be responded to in person by someone who could provide the answers.

It is grossly incorrect to say that design work on new projects virtually ceased because of the loss of valuable talent in the engineering department. To the contrary, design work as well as other engineering work continued at almost a feverish pace. While losing valued talent and good friends was regrettable, much of the talent was replaced.

To say that the board agreed to allow the communications program to continue only after Hill & Knowlton Inc. judged it to be one of the best in U.S. industry is a serious distortion of the facts. Hill & Knowlton was never engaged to evaluate Weirton's communications program. Hill & Knowlton did speak quite favorably of the program after being exposed to it by another consulting firm that was engaged by Weirton at the time. While the board was familiar with Weirton's communications program, it never engaged in any discussions with me as to whether or not it should continue. The program was a creation of management, and the board was supportive of it, as well they should have been.

It is incorrect to imply that the project

to update the hot-strip mill was developed subsequent to my retirement. The hot-mill program was quite far advanced when Mr. [Herbert] Elish came upon the scene, and I'm quite sure Mr. Elish would confirm that. Work on the program had been under way for nearly two years prior to my retirement.

Finally, Phillip H. Smith's implication that the company lacked focus during my tenure is quite far off the mark. It would be a rare thing indeed for a company lacking focus to improve its labor-management relations many times over, improve its market share in every one of its major product lines and markets, acquire hundreds of new customers, improve its productivity, embark upon the largest capital-improvement program in its history, and achieve excellent profitability when the steel industry was still seeking a turnaround. All of these things were achieved by Weirton Steel in good measure during the years 1984, 1985, 1986, and 1987.

Robert L. Loughhead
Annapolis, Md.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-6875, Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.



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Every Nation Builds Great Accomplishments

Throughout history, in one society after another, owning a home has been the exclusive domain of the rich and powerful.

For the rest, the idea was only a vague abstraction, an elusive dream.

Until America.

Where, for tens of millions, the dream of owning a home became a reality.

By 1986, the country had constructed its 100 millionth home. In the past 200 years, no other nation comes anywhere close.

But, of course, all this didn't just happen overnight. Fifty short years ago, less than half the country owned a home.

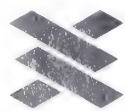
Then America's housing industry, with the government's help, went to work in earnest.

Today, we're among the best-housed people in history, with almost two out of three families living in homes of their own.

For our part, since we were chartered in 1938, we've pumped over \$400 billion into making the dream possible for some 8 million families from all walks of life.

We've worked hard to help keep buying and owning a home affordable. But we'll have to work even harder to meet the challenges of the 90s. And we will.

After opening doors for American home buyers for over 50 years, we're not about to let them close now.



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s Monuments To Its nts. This Is Ours.



THE ITT WARS: A CEO SPEAKS OUT ON TAKEOVERS

By Rand V. Araskog
Henry Holt • 241pp • \$19.95

A BESIEGED CHAIRMAN REPORTS FROM THE FRONT

It's a drama played out almost as often as *Dallas*. A raider announces that he has snapped up 5% of a huge company. The target scrambles to set up its defense, analysts put a price on the victim's head, and the public raves or boos, depending on who's in the bad-guy role this week.

As takeover fever rages on, the debate over its impact on the U.S. economy is growing shriller and more urgent. Raiders and investment bankers claim that the pressure forces managers to whip their companies into shape. Economists fret that highly leveraged takeovers could lead to massive insolvencies in the next economic downturn, with dire consequences. And on the sidelines sits the government, essentially content to let the situation drift.

Into this fractious dialogue comes

Rand V. Araskog, chairman of ITT Corp. Araskog brings a valuable perspective: that of a leader under attack. In 1984 and 1985, two sets of investors took aim at the conglomerate built by Harold Geneen and managed by Araskog since 1979. After considerable effort, Araskog defused both threats, first from Chicago financier Jay Pritzker and Denver oilman Philip Anschutz, then from raider Irwin Jacobs. But the fight seems to have left him embittered.

The ITT Wars is Araskog's personal account of his successful struggle to save the conglomerate's independence. It's also perhaps the most strident attack to date on the raider culture from a prominent executive. A West Point graduate and highly moralistic man who grew up on a Minnesota farm, Araskog believes most raiders are motivated by

simple greed. And he thinks greed is a terrible thing.

Supremely greedy is certainly how Pritzker and Anschutz look through Araskog's lens. In late 1983, he writes, the two tycoons sent a representative to ITT with an offer to take the company private in a leveraged buyout. The plan: ITT would buy Pritzker's Hyatt Hotels Corp. with stock, giving Pritzker a big stake in ITT at a fairly low cost. Then ITT would be sold to the two investors for perhaps two-thirds of its breakup value. Pritzker and Anschutz stood to make a \$3 billion killing, Araskog figures. And to "lubricate the transaction," ITT's senior management would get a 10% stake, with Araskog himself clearing some \$30 million. "I perceived [it] to be a gargantuan bribe," writes Araskog.

He rejected the offer. But Pritzker and Anschutz started buying ITT stock, accumulating more after ITT cut its dividend by 64% in a dramatic attempt to save cash. The two kept Araskog under pressure all through 1984. But when it became clear that they couldn't force a breakup of ITT, and no other serious bids emerged, they sold their stock. Pritzker still insists, though, that all his dealings with Araskog were friendly, and he calls

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IO ARASKOG: REVEALING INSIDE DETAILS

he bribe characterization ridiculous. Araskog adds a bizarre subplot of betrayal to his takeover saga. He intimates that ITT's long-serving public relations chief, Edward "Ned" Gerrity, headed a cabal that sought to depose the chair-

man and perhaps aid Pritzker. Araskog hints that Gerrity sent the ITT board anonymous letters, which Gerrity denied writing, denouncing Araskog's policies. He also believes Gerrity gave Pritzker's banker the names of ITT shareholders who had complained about the dividend cut. Those shareholders received letters asking them to request a proxy vote calling for ITT to be liquidated. As corporate politics go, it's juicy stuff—and may help explain Gerrity's suspension and eventual resignation.

Despite such fascinating material, Araskog often fails to capture the personal drama. Too often, the book reads like an excerpt from his daily calendar. He could have used a ghostwriter to translate his business-speak. And his prescriptions for turning the tide against raider culture, such as requiring reports of "toehold" investments of 1% rather than 5%, are neither new nor surprising.

The book's strength is its revelation of inside detail. We learn, for example, that ITT turned to Burroughs, Sperry, and Wang as possible white knights in 1985. The talks went nowhere, and not much later Burroughs and Sperry announced their own merger into Unisys.

Then, in a sudden about-face in 1986, Araskog moved ITT largely out of technology by selling a majority stake in its

sprawling European telecommunications division to France's Compagnie Générale d'Electricité. He reveals for the first time that a sale to Canada's Northern Telecom Ltd. was seriously discussed, too. Telecommunications had been the core of ITT since it was spun off from American Telephone & Telegraph Co. in the 1920s, and the CGE deal must have

With raiders in hot pursuit, Araskog in 1985 turned to Burroughs, Sperry, and Wang as white knights

been a wrenching decision. Yet Araskog doesn't really explain his rationale.

In fact, poor writing and the lack of a human element are the book's major flaws. At one point, Araskog admits that he's "no Iacocca at mesmerizing people." But if you want to know what the takeover trenches are like, *The ITT Wars* is a good primer.

BY MARK MAREMONT

London Correspondent Maremont covered the telecommunications industry for BW from 1983 to 1986.

ANDREW POPPER

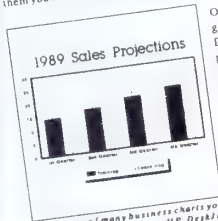
But they keep looking at the evidence.

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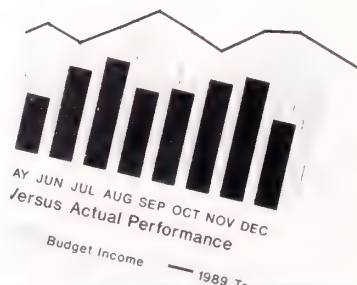
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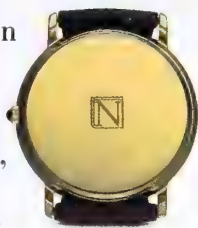
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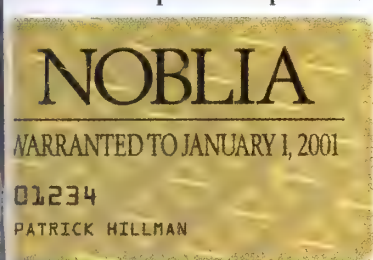
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*For details, see manufacturer's warranty.

DON'T HAND OUT PRIZES FOR HISTORICAL AX-GRINDING

BY PAUL CRAIG ROBERTS



These days, awards for books about economics are often given to writers who advance ideological agendas and disregard the standards of scholarship

Columbia University's business school recently awarded its George S. Eccles Prize to Harvard economics Professor Benjamin M. Friedman for his book *Day of Reckoning: The Consequences of American Economic Policy Under Reagan and After*. Friedman's thesis is that, in order to cut taxes for the rich, the Reagan Administration was disingenuous about the deficit and its economic consequences.

According to Friedman, Reagan's policymakers were either foolish in believing that the 1981 tax cut would pay for itself or immoral and irresponsible—hiding deficits in a phony forecast in order to mortgage our country's future and force Americans to give up big government. The motives Friedman impugns, the name-calling, the allegations of broken faith, failed policy, and imperiled future—all are based on his unverified assumption that the Reagan Administration did not forecast the revenue loss from the tax cut.

'TWIN DEFICITS.' As any number of official government documents on public record reveal, the Reagan Administration's economic and budget plans were based on the forecast that every dollar of tax cut would cut a dollar of revenue. The revenue loss was both anticipated and revealed. Yet Random House published, and Columbia awarded, a book that chose to attack the character of an Administration rather than check out the facts.

Friedman's book falls down in other ways. He relies on the "twin deficits" theory, which says the tax cut caused a budget deficit that, in turn, caused the U.S. trade deficit, putting us in hock to foreigners. He presents this as an iron law of economics and simply ignores the facts that Canada, with no tax cut, has a trade surplus despite a massive budget deficit, while Britain, with a major tax cut, has a large budget surplus and a record trade deficit.

Much of Friedman's tirade is based on his charge that the Reagan tax cuts made the U.S. the world's largest debtor. As studies by Rand Corp. and others have shown, this claim is based on measuring the value of our foreign assets according to what we paid for them. That is like a person computing his net worth by listing the value of his home at the price he paid for it 5, 10, or 20 years ago.

Economists are supposed to studiously avoid such pitfalls and, indeed, they expect their graduate students to rigorously check the facts and alternative explanations. If Friedman's book had been submitted as a PhD dissertation, it would have been rejected for failure to meet basic scholarly standards.

Another recent prize that raises doubts is the award of the American Political Science Assn.'s Terry McWilliams Prize to a "history" of the 1986 Tax Reform Act by *Wall Street Journal* reporters Jeffrey Birnbaum and Alan Murray. Titled *Showdown at Gucci Gulch*, the book presents the legislation as a victory of people-centered Democrats over rich, venal, business-oriented Republicans.

The central challenge of tax reform was to pay for lower tax rates by broadening the tax base without jacking up taxes on investment and undercutting our competitive position in the world economy. This was a complicated and difficult task—and one not altogether successful—but no aspect of the story can be found in *Gucci Gulch*. Instead, Birnbaum and Murray provide a fictional account of class warfare, with the white hats led by Democratic Senator Bill Bradley (N.J.) and the black hats led by supply-side agents of Corporate America.

The ideological ax-grinding of this history is apparent from the adulatory tone the authors take toward those they label heroes of the people and the subtly sneering and derogatory characterizations they employ against individuals they have placed on the wrong side of the class war.

While *Gucci Gulch* reveals practically nothing about the substance or politics of the nation's tax reform, it does make the reader wonder about the politics of the authors and their Random House editors, as well as the American Political Science Assn.

LOST LUSTER REGAINED? Academics who are dependent on the public's purse risk their own future when they cheapen scholastic honors by elevating slipshod exercises in hyperbole to prizehood. Many, including well-known liberal professors, already believe that since the 1960s universities have increasingly sacrificed scholarly standards to political agendas. Liberal Professor Allan Bloom's exposé of the politicization of academic life, *The Closing of the American Mind*, surprised everyone by becoming a best-seller. Former Education Secretary William S. Bennett struck an equally strong chord with the public by criticizing the ideological intolerance that seems to have taken root in so many of our universities.

Something is indeed wrong when hundreds of scholars feel they must create a new national organization—the National Association of Scholars—for the purpose of reclaiming the universities for the life of the mind and transmission of knowledge. If they succeed, prizes awarded by universities will regain their lost luster.

PAUL CRAIG ROBERTS HOLDS THE WILLIAM E. SIMON CHAIR OF POLITICAL ECONOMY AT THE CENTER FOR STRATEGIC & INTERNATIONAL STUDIES IN WASHINGTON

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Economic Trends

BY MICHAEL J. MANDEL

JAPAN IS THE BIGGEST U.S. INVESTOR—BUT EXACTLY HOW BIG?

With the dollar in the doldrums, the U.S., it seems, is becoming a bargain basement for Japanese companies. According to a report soon to be released by the U.S. Bureau of Economic Analysis (BEA), Japan's direct investment in the U.S. more than doubled from 1987 to 1988. (Unlike portfolio investment, a direct investment is actually controlled by a foreign company.) And for the first time, Japan was the top direct investor. While total direct investment from abroad barely increased last year, to \$42.2 billion from \$42 billion in 1987, Japanese companies were pouring in \$15 billion, beating out perennial leaders Britain and the Netherlands.

Samuel M. Rosenblatt, president of the Association for Foreign Investment in America, a trade group of U.S. and foreign multinationals, estimates that Japan's cumulative direct investment totals more than \$50 billion, exceeded only by Britain's \$90 billion. Just five years ago, Japan had only \$11 billion in direct U.S. investments.

The BEA figures understate the true

amount of Japanese investment. The reason is the use of leverage and debt. Take real estate. As Gregory Fouch, economist at the BEA, points out, if the U.S. subsidiary of a foreign company buys a property, and the purchase price is financed by a mortgage from a U.S. lender, then as far as the BEA is concerned only the downpayment counts as direct foreign investment. By the BEA's preliminary assessment, foreign direct investment in real estate last year totaled

about \$2 billion—barely enough to buy a couple of Manhattan skyscrapers. But the actual size of the purchase is much greater, as independent estimates seem to bear out. The accounting firm of Kenneth Leventhal & Co. reports in a recent study that the Japanese alone bought \$16.5 billion in real estate last year. Likewise, when a foreign company acquires a U.S. corporation using debt, the debt part of the deal is not counted in the BEA figures. And the Japanese are becoming more active in corporate acquisitions. In 1987, six of the top 20 mergers and acquisitions were made by foreign companies—but none of them were Japanese. In 1988, foreigners took nine of the biggest 20 deals, and the Japanese did three of them, with a market value of \$6.8 billion. And like real estate, these acquisitions, too, may not be fully reflected in Japan's already soaring direct investment numbers.

THE HIGH COST OF NOT GOING TO COLLEGE

Tuition costs have risen dramatically in recent years, but has the value of going to college? Yes, if you measure it relative to the value of not going to college. Frank S. Levy, an economist at the University of Maryland, notes that while the real wages of college graduates were rising over the past decade, the real wages of high school graduates were falling. The result has been a rapidly widening gap between the value of a high school and college degree. In 1979 the average male college graduate aged 25 to 34 earned 18% more than a high school graduate of the same age. By 1986 the advantage had jumped to 43%, and it remains at about that level today. The earnings gap also widened for women, though not as dramatically.

The growing wage gap between a college and high school education has come as a surprise. It reverses what was happening in the 1970s. Between 1973 and 1979, the oversupply of college graduates caused them to lose ground compared with high school grads. But then, says Levy, some blue-collar workers started getting squeezed out of manufacturing jobs by import competition and by technological change. As a result, more high school graduates were competing for fewer manufacturing jobs. This led to lower wages not only in manufacturing but also in the service sector, where blue-collar workers were forced to seek employment.

Levy notes that high school grads are having trouble getting jobs in manufac-

turing for another reason. Companies are setting more sophisticated requirements for blue-collar jobs. "If firms start giving numeracy and literacy tests for blue-collar jobs," says Levy, "then simply closing the trade gap" won't close the wage gap.

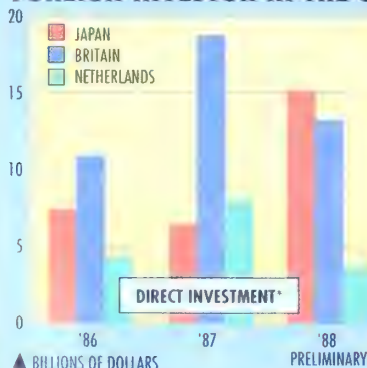
THE EXPANSION IS FINALLY REACHING THE INNER CITY

Here's evidence that if a rising tide lasts long enough, it eventually lifts all boats. The unemployment rate for the black population had remained stubbornly high despite one of the longest economic expansions in the postwar era. But recent figures from the Labor Dept. confirm that the strong economy is finally reaching this group. Over the last year the number of jobs held by blacks rose by 3.4%, much faster than the overall increase in employment. As a result, from March, 1988, to March, 1989, the unemployment rate for blacks dropped from 12.5% to 10.9%. And the unemployment rate fell even among black teenagers, a group that usually experiences trouble in the labor market. Most of these new jobs are low-paying. And with the economy apparently slowing, these gains may turn out to be the high-water mark for black employment.

IF YOU WANT TO KNOW ABOUT TRADE FLOW, ASK A STEVEDORE

With the growing importance of trade in the fortunes of the U.S. economy, a favorite game of economists is forecasting the balance-of-payments deficit. Most forecasters use a macroeconomic model of the economy to come up with their number. Not Michael P. Niemira. An economist at Mitsubishi Bank in New York, Niemira asks the people who actually handle the imports and exports. He surveys about 30 of the biggest seaports and air cargo companies each month, asking how much export and import traffic they expect over the next three months. Putting together their responses gives him a good picture of near-term trade trends. His latest forecast, based on February's survey, is for both imports and exports to grow strongly in the coming months. But Niemira notes that since import volume starts out at a much higher level than export volume, he expects the trade deficit to widen from the latest monthly figure of \$10.5 billion.

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DATA: BUREAU OF ECONOMIC ANALYSIS

amount of foreign investment. The reason is the use of leverage and debt. Take real estate. As Gregory Fouch, economist at the BEA, points out, if the U.S. subsidiary of a foreign company buys a property, and the purchase price is financed by a mortgage from a U.S. lender, then as far as the BEA is concerned only the downpayment counts as direct foreign investment. By the BEA's preliminary assessment, foreign direct investment in real estate last year totaled

THE HEAT IS OFF —BUT IT STILL MAY NOT BE COOL ENOUGH

The soft look of the March economic data has been a tonic for the financial markets. Investors in both stocks and bonds feel cheerier because they know a cooler economy will take pressure off inflation—and interest rates.

The latest numbers seem convincing enough. They show that industrial production has lost some zing, partly reflecting slower export growth. In the consumer sector, retail sales have turned sluggish. Housing is buckling under the burden of rising interest rates: Home starts slumped 5.4% in March, after a 12% drop in February, to an annual rate of 1.4 million. And new building permits plunged to their lowest rate in 6½ years.

Although investors seem pleased, economists are grappling with some key questions. Is the first-quarter slowdown only temporary? The Commerce Dept.'s report on last quarter's gross national product, due on Apr. 26, is likely to show that the slowdown was concentrated in consumer spending, with other areas of the economy taking up the slack.

Moreover, the consumer slowdown was centered in auto sales. Retail sales in March rose a scant 0.1%, to \$39.4 billion, after a 0.6% drop in February, and sales were no higher than they were last November. For the quarter, sales rose at only a 2.1% annual rate, down sharply from the fourth quarter's 9.2% pace.

But excluding cars, first-quarter retail sales were up 4%, not much below their 6.8% pace in the fourth quarter. With income growth and consumer confidence still strong, buying this quarter is likely to be brisker.

PRICES ARE SPEEDING UP ACROSS THE BOARD

A tougher question: Will slower growth alone be enough to brake inflation's faster pace? Inflation is becoming embedded in the economy. In the past, when inflation has moved to a higher level, it has taken an outright recession to stop its rise.

The steady upward pressure on prices shows up at both the producer and the consumer levels, even when food and energy are removed (chart). The consumer price index rose 0.5% in March, following increases of 1.4% in February and 0.6% in January.

Food and energy accounted for some of those gains, but the acceleration has been broad. During the first quarter the CPI rose at a 6.1% annual rate. But even

excluding food and energy, the pace was still 5.2%.

Most of the acceleration in consumer prices has been in services. During the past six months prices of goods other than food and energy rose at a 4.2% annual rate, but prices of nonfood, nonenergy services are up 5.7%. Particularly sharp increases have come in medical care and transportation services.

And there's still plenty of upward pressure on goods prices. Producer prices of finished goods were up 0.4% in March, after 1% jumps in both January and February. Food and energy fueled much of the rise last quarter, but as with consumer prices, the pressures are broad and are still building at the earlier stages of processing.

During the past year producer prices of finished consumer goods, excluding food and energy, rose by 5%. That's much faster than the 3.8% increase in retail prices of goods other than food and energy. If retailers don't respond by raising prices, they'll see their profit margins shrink.

FACTORIES CONTINUE THEIR BREATH

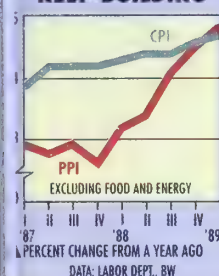
The best hope for reducing inflationary pressure is a significant, long-lasting moderation in demand. So far the cooler pace of both exports and consumer spending has slowed the industrial sector a bit, loosening capacity slightly. But operating rates will have to keep sliding to relieve pressure on prices.

Production at the nation's factories, mines, and utilities was flat in both February and March. In manufacturing alone, output fell 0.1% in March, wiping out February's 0.1% gain. That reduced capacity utilization rates a notch in March, to 84%, from 84.2% in February. Manufacturing rates dipped to 84.4% from 84.7%.

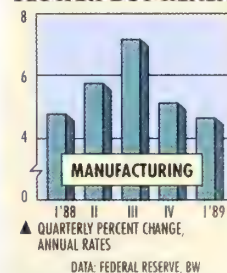
For the first quarter as a whole, though, the industrial sector still looked healthy. Factory output rose a strong 0.8% in January, and for the quarter it grew at an annual rate of 4.6% (chart). That was the smallest quarterly gain registered in two years—before the export boom—but it's still a solid advance.

Most industries contributed to the first-quarter gain. Consumer-goods output grew at an annual rate of 4.5%, and business-equipment production jumped at a 9.7% pace. Output of industrial materials, however, was nearly flat last quarter, partly reflecting the falloff in export growth. In addition, oper-

PRICE PRESSURES KEEP BUILDING



OUTPUT GROWTH: SLOWER BUT HEALTHY



Business Outlook

ating rates in some primary processing industries are so high now that it's hard to boost output.

Manufacturing's biggest weak spot last quarter was the auto industry. Seasonally adjusted car production fell at an annual rate of 3% in the first quarter, causing scattered secondary impacts in steel, plastics, and glass.

LOTS OF CARS ON DEALERS' LOTS

Despite the decline, auto makers still produced more cars than dealers sold. As a result, inventories on car lots stood at a 77-day supply at the end of March, compared with a normal 60- to 65-day supply.

New-car sales in early April climbed to an annual rate of 7.6 million, fueled by Detroit's latest round of financing incentives. But that might not be enough to pare stocks to manageable levels. Auto makers are planning to produce 2 million cars this quarter. And if inventories stay high, third-quarter schedules could be slashed. That would further weaken overall industrial output.

Except in autos, inventories don't seem to be excessive. Inventories held at factories, wholesalers, and retailers increased by just 0.5%, to \$763.6 billion, in February. And the ratio of stock levels to sales, although up a bit in February, remains low. Naturally, the biggest inventory gains were at car dealers, but other businesses also added to stockpiles in February.

If domestic demand continues to slow, retail inventories may start to build faster than desired. That would cut into factory orders and help reduce inflationary pressures on capacity at a time when gains in foreign demand are also slowing down.

THE EXPORT BOOM IS BEGINNING TO WANE

In February exports continued to show signs that foreign demand was cooling off. They rose only 0.6%, to \$28.9 billion. Most of the increase was from automobiles and other consumer goods. Capital goods—the leader of the 1987-88 export boom—increased just 0.2%, and

exports of agricultural products fell 5.4% for the month.

Over the past 12 months exports have increased by 18%. That may not seem like a slowdown, but last year exports were growing at a rate of 27% to 36%. Weaker growth was most evident in exports of capital goods and industrial supplies—which, when combined, account for three-fifths of all exports.

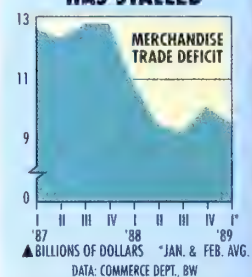
Imports have slowed a bit, too. That's to be expected given the sluggish pace of consumer spending last quarter. But import growth is still so rapid that the trade deficit remains intractably wide. In February imports increased by 5.3%, to \$39.4 billion—barely below December's record high—with bigger shipments into the U.S. of automobiles, capital goods, and consumer products.

As a result, the merchandise trade gap in February widened to \$10.5 billion, from \$8.7 billion in January. Clearly, improvement in the trade balance has stalled. So far in the first quarter, the deficit is averaging \$9.59 billion per month. That's not much better than its performance in the previous three quarters (chart).

An upward thrust in U.S. inflation won't help. With domestic costs rising, exporters may try to increase prices to overseas buyers. The stronger dollar has already made U.S. goods less price-competitive in important foreign markets, and the loss in competitiveness is even greater after adjusting the dollar's value for inflation. That means export growth will continue to slow down.

And if consumer spending picks up again, imports will keep rising. The result: little improvement—or even a worsening—in this year's trade deficit. But consumers will continue to fuel industry and keep upward pressure on inflation.

TRADE IMPROVEMENT HAS STALLED



THE WEEK AHEAD

DURABLE GOODS ORDERS

Tuesday, Apr. 25, 8:30 a.m.

New orders for durable goods probably rose about 1.5% in March, after falling 2.8% in January and 3.3% in February. Unfilled orders, however, rose strongly in those months, and the expected March increase for new bookings suggests that hardgoods manufacturers will boost output in the second quarter.

EMPLOYMENT COST INDEX

Tuesday, Apr. 25, 10 a.m.

Labor costs for nonfarm businesses probably rose 1.5% in the first quarter, up about 5% from the first quarter of 1988. Benefits and wages should contribute about evenly to the overall increase.

Fourth-quarter employment costs grew 1%, also up 5% from a year earlier.

GROSS NATIONAL PRODUCT

Wednesday, Apr. 26, 8:30 a.m.

The consensus is that first-quarter GNP increased by an annual rate of 5.5%. About 2.5 percentage points of that comes from the farm sector's recovery from last year's drought. In the nonfarm economy, a smaller net-export figure and increases in business and residential investment offset slower consumer spending. Fourth-quarter GNP grew at a 2.4% annual rate. Economists also expect that inflation, as measured by the GNP fixed-weight price index, rose at an annual rate of 5.2%, compared with a fourth-quarter pace of 4.2%.

PERSONAL INCOME

Thursday, Apr. 27, 10 a.m.

Personal income most likely rose by 0.7% in March, after gaining 1% in February. That's suggested by increases in weekly earnings and nonfarm jobs, plus rising interest rates that will boost interest income.

CONSUMER SPENDING

Thursday, Apr. 27, 10 a.m.

Consumers probably increased their spending by a modest 0.3% in March, following a 0.5% rise in February. A 3.1% drop in total car sales suggests a similar fall in spending on new cars. That will offset gains in spending for nondurables and services.

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WALL STREET RUNS SCARED

THE DREXEL STUNNER PRESAGES MORE LAYOFFS

In sunny California, La Costa Hotel & Spa is synonymous with the good life. And as scores of Drexel Burnham Lambert Inc.'s superstar brokers gathered there just a couple of weeks ago, Drexel's many woes back in the dank, gray alleys of lower Manhattan couldn't have seemed more distant. There was food, drink, golf—even herbal facials for the ladies. "We all had a great time," says one broker. "Now can you believe this? We're getting sold down the river."

On Apr. 18, Drexel stunned Wall Street with plans to sell its entire retail network—the very origin of the giant firm and the legacy of founder I.W. "Tubby" Burnham II. The startling news didn't stop there: Drexel is set to curtail several businesses, from municipal bonds to foreign stocks. The firm isn't saying how many heads will roll. But insiders think as many as 4,000, or 40%, may be wiped off the payroll. "It's like ripping out a lung," cried one employee. Said another in Drexel's Newport Beach (Calif.) office: "Everybody here is very upset. We went through the investigation with all its negative publicity, probably lost a lot of clients, and this is the thanks we get."

It may be small solace, but Drexel Chief Executive Frederick H. Joseph

himself may not yet be in the clear of the wide-ranging investigation into alleged wrongdoing. On Apr. 19, Securities & Exchange Commission Chairman David M. Ruder hinted to a congressional committee that Joseph and other Drexel executives may face securities-law charges—despite the firm's recent settlement with the government.

LUSH LIFE. Such troubles are obviously unique to Drexel—a fact to which Joseph alluded in announcing the bad news. But he might have added that bad news is on the way to virtually every house on Wall Street. The days of lush living and rich rewards are over. Trading volume is down, mega-fee mega-mergers are off, and competition is as hot as ever. Without lucrative new products, the securities industry's profit margins figure to be in a big squeeze for some time. And while more than 17,000 Wall Streeters lost their jobs after the crash of October, 1987, plenty more will soon be pounding the pavements. "Listen," says an industry executive, "we're not running a community chest."

The signs are everywhere. Salomon Brothers Inc. recently pruned its equity operation by about 50 people. On Apr. 19, Shearson Lehman Hutton Inc. reported a first-quarter loss of \$15 million. That's down from a \$75 million profit in



TAKING A BREATH:
REVENUES ARE
FLAT FOR THE
THIRD STRAIGHT YEAR

last year's first three months. Five days earlier, Merrill Lynch & Co. posted a 50% drop in first-quarter profits. Says Kenneth R. Leibler, president of the American Stock Exchange: "I see additional layoffs at the firms after the first quarter earnings come out."

In truth, there's plenty of room for cutbacks. Wall Street used the long bull market, which lasted from August, 1982,

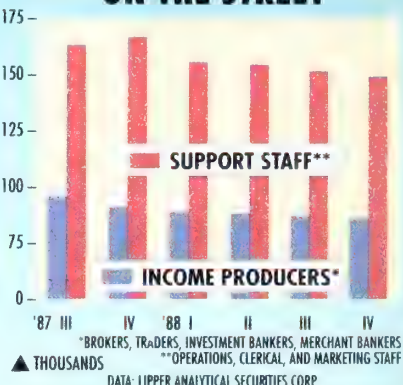
MEDIOCRE TRADING VOLUME...



...AND A SHORTAGE OF NEW DEALS...



...SIGNAL FURTHER CUTBACKS ON THE STREET





the crash, as an excuse to expand adly. Many firms—Drexel and Salomon are but two—tried to serve every market, meet every need. Up went overad. Perrin H. Long of Lipper Analytical Securities Corp. notes that as 1989 wned, Wall Street still was employing 0,000 who don't directly produce revenues. Says Long: "Most managements uld let go 5% to 7% of their employees thout any major negative impact." If Wall Street had only to worry about sts, cuts might do the trick. Trouble is, venues are expected to run flat for the ird straight year. Investors are still arting from the crash. That has cut mmission income. The sharp falloff in almaking means those multimillion-llar fees are hard to come by (charts). Even as such sources of revenue dry , competition is intensifying: Big institutional investors have pressured brokers to cut trading commissions to as le as 3¢ a share, from about 8¢ in the ll market. Even the floor brokers and ecialists at the New York Stock Exchange are complaining that the major all Street firms are squeezing them rder than ever. Says one: "They're in

effect telling us to accept their terms or we're history."

What every house on the Street could dearly use, and fast, is an innovation—something like Drexel's junk-bond empire, or what Salomon conjured up a decade ago by bundling home mortgages into liquid securities. Such products can be sold, for a while anyway, on a proprietary basis—with profit margins to

**'They're in
effect telling us
to accept their
terms or we're
history'**



match. Possibly there's just such a thing on the horizon. Or there may be some other unseen healthy trend, like the explosion in institutional trading and professional money management that rocketed Wall Street ahead in the 1960s.

But if not, Wall Street is sure to shrink more. Even Drexel, whose rise in the 1980s wowed the industry, is beset by competition in mergers and acquisitions financing. For instance, on Apr. 18, Hollywood billionaire Marvin Davis unveiled financing plans for his hostile bid for NWA Inc. (page 30). Who would help lead financing for the deal? Donaldson Lufkin & Jenrette Securities Corp., which hardly would have been up to the job a few years back.

MAGIC TRICK. Given the competitive climate, Drexel's move to concentrate on its core businesses of investment banking, corporate finance, and junk bonds seems sensible. Since the mid-1980s the junk-bond operation has helped to provide roughly 80% of its bottom line. Junk bonds are plainly a winner in profitability, and the source of heavy subsidies for many of the firm's marginal units.

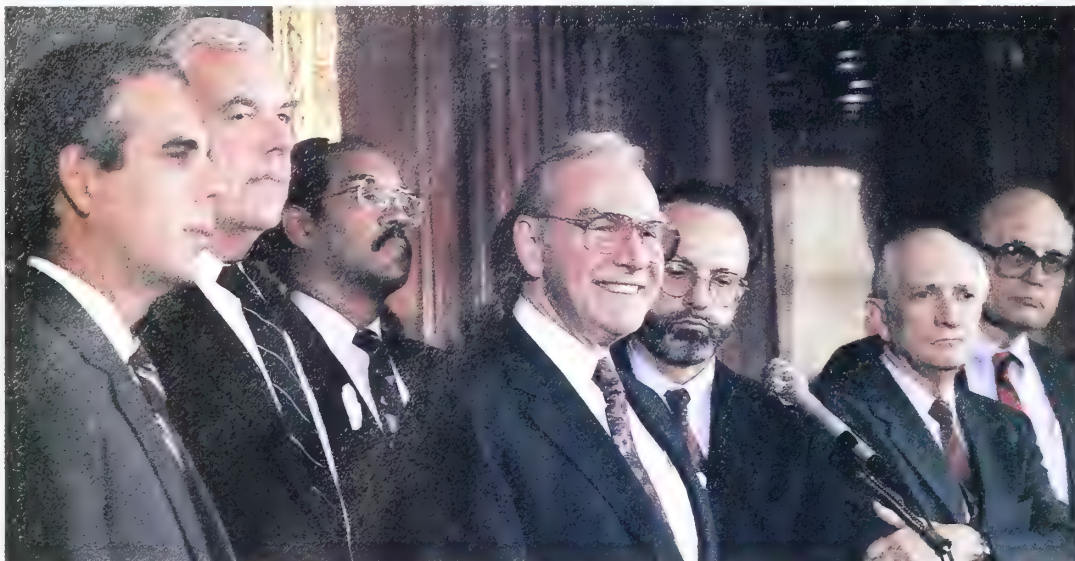
To Drexel's public image, of course, junk bonds have been nothing but trouble. The operation's chief, Michael R. Milken, has been indicted on 98 counts of securities-law violations. And although Milken pleaded innocent, Drexel cut him loose—just one part of the deal the firm struck to settle the government charges it faced. Still, Drexel needs an infusion of respectability, something it hopes to regain under its new chairman, former SEC head John S.R. Shad. And by chopping the retail unit, Drexel performs a neat bit of magic. Explains one top Drexel official: "What you're seeing is a gravitation from the visible marketplace, where imagery is very important to the professional marketplace, where performance is important."

Who will pick up Drexel's retail outfit? Perhaps Merrill, but the name most mentioned is Smith Barney, Harris Upham & Co., part of Wall Street bottom-fisher Sanford I. Weill's Primerica Corp. He may be able to get the retail network fairly cheaply.

If Weill were the buyer, that would be another sign that the malaise is likely to deepen. He first made his mark in the 1970s, a listless time on the Street, buying up distressed firms and building what ultimately became Shearson Lehman Hutton. When Weill is on the prowl, it is usually safe to say that Wall Street is in the grip of its own bear market. The only question is when and where it will end.

By Jon Friedman in New York, with Chris Welles in New York and Eric Schine in Los Angeles

CAPITOL HILL



SPEAKER WRIGHT: HE MUST DIVERT HIS ENERGIES FROM LEADING THE CHARGE TO SAVING HIS OWN SKIN

SHREDDING THE DEMOCRATS' AGENDA

The ethics charges against Jim Wright have party initiatives on hold

Democrats felt downright cocky when an exuberant House Speaker Jim Wright (D-Tex.) opened the 101st Congress on Jan. 3 by declaring: "This is going to be a very busy and productive year."

As events unfolded, it looked as if the Democrats had reason to crow. The Senate crushed the nomination of John G. Tower as Defense Secretary. A conciliatory President Bush bowed to Democratic demands that he give up on military aid for the Nicaraguan *contras*. And Democrats moved swiftly to put the White House on the defensive over an increase in the minimum wage.

NO RELIEF. But suddenly, Democrats' hopes of seizing the policy agenda have been dashed. The man they counted on to lead the charge now must devote all of his efforts to saving his own skin. Instead of pushing ambitious social legislation, Wright's colleagues will be sitting in judgment on the Speaker's ethics—and perhaps driving him from office. So far the Speaker "is losing the war of perceptions," says Representative Ed Jenkins (D-Ga.).

There's no relief in sight. The House is bracing for one of the most sensational misconduct trials in its history. The ordeal could well last into the summer, and the testimony about Wright's financial dealings won't improve the public's already dim view of Congress. Frets

Representative Timothy J. Penny (D-Minn.): "Even if Jim Wright is proven innocent, you can't go through weeks of this without its doing damage."

The House won't be totally paralyzed. Such issues as the budget (page 39), the savings and loan industry rescue plan, and key environmental legislation will continue to move. But gone is the leadership moxie to push through such controversial plans as parental leave, child care, and comprehensive health insurance. "Democrats will be less able to pursue their agenda," says Thomas Mann of the Brookings Institution. "And if partisan tensions are high, it may be harder to bring the parties together on any issue."

The White House, wisely, is keeping clear of the Wright soap opera. Chief of Staff John H. Sununu "has cautioned the staff to stay away from it," says a White House official. Even House GOP partisans are content to remain on the sidelines. "We ought to shut up, step back, and see what the Democrats want to do with their Speaker," says Representative Vin Weber (R-Minn.).

Still, a few GOP hardliners are eager to go on the offensive. House Minority Whip Newt Gingrich (R-Ga.) and Ed Rollins, executive director of the National Republican Congressional Committee, think that making Democratic corruption a national issue will drive voters to

the Republican ranks.

Political consultants from both parties think the GOP will have a hard time tarring Democrats with Wright's alleged misdeeds. "I don't think Republicans are going to have more success with Jim Wright than the Democrats had with [the ethical problems of Reagan Administration officials] Anne Gorsuch, Ed Meese, and Mike Deaver," says Republican media strategist Don Supple.

Already, Democratic lawmakers are trying to put the best face on the allegations against Wright. Many feel loyal to their Speaker, but

others are worried that the standards used by the ethics panel to charge Wright could ensnare them as well. They may use the controversy to push for simpler, clearer guidelines. "Maybe one of the good things to come out of this will be new ethics rules," says House Democratic Caucus Chairman William H. Gray III (D-Pa.).

The Speaker's strategy will be simple. He plans to issue daily fact sheets, responding in detail to one charge at a time. He's also considering repayment of \$145,000 in gains that the ethics panel has questioned.

RESONANCE. Wright will win sympathy from lawmakers on the charge that his friend and benefactor, Fort Worth developer George Mallick, had a "direct interest" in legislation while providing Wright's wife, Betty, with a Cadillac Seville and an \$18,000-a-year salary, as well as a rent-free condominium for the Wrights. Many feel that the committee stretched to establish a special-interest tie between Mallick and Wright.

But the most troublesome charge may be that the Speaker's practice of asking unions and trade associations to buy copies of his memoirs amounted to a "scheme to evade" limits on outside income. "That would be serious," says Representative Steny H. Hoyer (D-Md.).

Can Wright survive? Although he won't leave without a protracted struggle, his days as Speaker may be numbered. In his opening-day speech, Wright observed that the House has been "the most malleable instrument of the public will." There is nothing more malleable than a congressman with his finger aloft to the political winds.

By Douglas Harbrecht and Richard Flynn in Washington

IF IT LOOKS LIKE A SLUMP AND CRAWLS LIKE A SLUMP . . .

Heavy discounts as signs of softness in U.S. computer demand spread

Is the computer business headed for another slump? Makers such as IBM and Digital Equipment Corp. say no—that their March-quarter earnings fell short of expectations because of problems unique to themselves. “Worldwide demand across our product line continues to be good,” says IBM Chairman John F. Akers. IBM’s problem: trouble making certain microchips, which delayed shipments of top-of-the-line mainframes.

But there are troubling signs of softening demand for computers, especially in the U.S. market, where sales already have been weak for a year now. The Commerce Dept. reports that seasonally adjusted new orders for computers in the U.S. during February fell a surprising 11.6% from the month before. A survey by Sierra Group, a market researcher in Tempe, Ariz., finds 40% of corporate data processing chiefs ready to cut back computer spending if the inflation rate goes up. Perhaps more telling, IBM has been offering heavy discounts and other incentives. “There’re only a few straws in the wind, but there’s definitely a slowdown,” says William Easterbrook, a Kidder, Peabody & Co. computer analyst. The experience of 1985, when computer makers walked chin-up to the most severe downturn in the industry’s history, is still fresh in many minds.

HEAD WIND. It’s widely agreed that the worldwide computer business will be lucky to see total revenues grow this year by 8% or 9%, down from 12.5% in 1988. Not only will the comparison be to a stronger previous year, but there’s also a good chance that the positive effect of currently strong foreign sales will weaken. Sanford C. Bernstein & Co. analyst Don Young estimates that the dollar will have a 3%-to-6% negative effect on U.S. companies in the first half of 1989, compared with its 6%-to-10% boost a year ago. What was once a “tail wind,” he observes, is turning into a “head wind.”

Meanwhile, soft European sales for Tandem Computers Inc. lately have raised fears that overseas markets may be ready to slow down, too. Most of the growth that companies such as IBM, DEC, and NCR have been able to gain lately

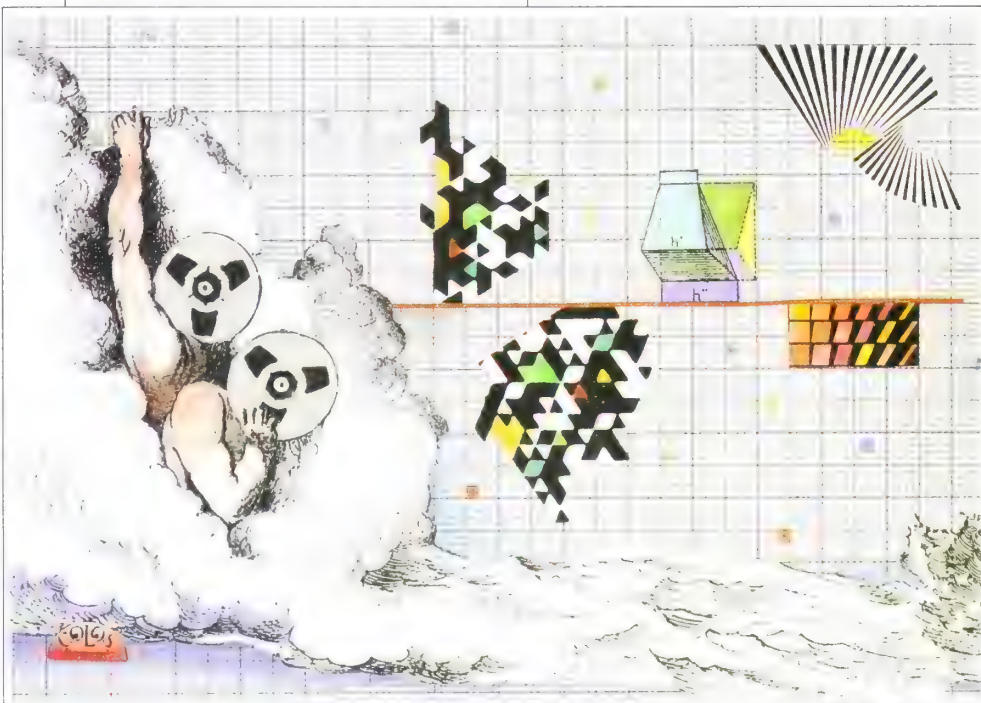
has been from those markets. IBM, for one, gets almost 58% of its revenues overseas, and a 15% growth there in dollar terms last year offset a 1% U.S. decline to give it overall growth of 8%.

But why the prolonged weakness in U.S. demand? Some of it is due to troubled customers. Wall Street, for instance, has slowed its expansion of many IBM mainframe systems, insiders say. More damaging is a convergence of technical factors, such as the accelerating pace of technological change. Denser microchips are driving down prices for desktop computing by 20% or 25%. As

mini leader Digital Equipment last January to make a big push against Sun Microsystems Inc. and other workstation makers with its own product, effectively priced at 5% of its own large minis.

SHRINKING ORDERS. Product cycles also have hurt. DEC’s core minicomputer business, for instance, has been progressively weakening, as customers wait for a new family of machines later this year. In contrast, IBM has been enjoying strong sales of its AS/400 minis, which entered the market less than a year ago.

Mainframes have been less directly affected by the shift to desktop computing. Most mainframe applications can’t easily run on small systems. But the \$57 billion large-systems business is evidently slow these days. To spur sales of its 3090 processors last year, for instance, IBM began offering customers a \$50,000-per-unit rebate if they would take delivery before Dec. 1. That offer apparently worked, helping IBM turn a relatively strong 1988 profit, but now there are



Kidder Peabody’s Easterbrook points out, however, customers can’t harness that ever-cheaper horsepower because of the slower progress in software development. The result: Customers can easily find themselves equipped with more computer than they can use. After a recent round of system purchases at Bankers Trust Co., “it will take us a year to 18 months to absorb our excess capacity,” says Stanley M. Rose, the bank’s vice-president for technical architecture.

Cheap desktop systems are cutting deepest into sales of minicomputers. Dataquest Inc. saw U.S. sales of minicomputers grow only 9.7% last year, while desktop systems were up 21.4%. The shift to the smaller systems prompted

fewer orders to be filled in early 1989. Says Tom Martin, president of computer leasing firm Computer Financial Inc. in Hackensack, N.J.: “I’ve never seen so few [large-system] shipments from IBM in a single quarter.”

IBM still has a great opportunity with the 3090, for its customers are using an estimated \$8 billion worth of earlier machines that could be replaced by 3090s. The challenge is to exploit that potential profitably. But in the face of an eventual recession and the likelihood of shrunken capital-spending budgets, it’s a challenge that IBM and its brethren will find increasingly difficult to meet.

By John W. Verity in New York, with bureau reports

THE QUEST FOR PROFITS IS TAKING SOME SURPRISING TURNS

As shareholders get tougher, companies are going global—and playing roulette with debt

Today's shareholders are a demanding lot. To keep them happy, many companies are trolling in foreign waters for higher profits. Others, like Marriott Corp., are buying back stock. But as you'll see, not every strategy that looks good on paper works out in real life.

THE ACTION IS ABROAD

Buried in the footnotes of 1988 annual reports and lost in the flurry of earnings releases is a startling trend: Many large U.S. companies are earning more abroad than at home.

Coca-Cola Co. made more money on soft drinks in both Japan and Europe than it did in the U.S. in 1988. Goodyear Tire & Rubber Co. saw its domestic profits plunge, but foreign earnings, primarily in Latin America, propped up overall results. General Motors Corp. barely broke even at home, but its profits in Europe helped it record an overall increase.

And where there's growth, investment dollars are sure to follow. The latest Commerce Dept. figures show that after increasing overseas capital spending by 24% in 1988, U.S. companies will spend 12.9% more this year. In contrast, stateside investment is expected to increase only 6.3%.

on the heels of a 10.1% rise in 1988.

This spending burst, after a long period of dormancy, is being sparked by everything from Europe's planned market integration by 1992 to the new free trade agreement with Canada. Some U.S. executives acknowledge that their spending plans are spurred by the assumption that U.S. economic growth will be flat, if not in recession. Overall, this activity shapes up as the biggest foreign earnings and investment push since the late 1960s.

It's mostly bad news for the U.S. trade gap, though. To meet foreign demand, many big American companies are building new plants abroad rather than adding capacity at home. Even though the U.S. is now a cheaper manufacturing base than Japan or Germany, companies are concluding that they must make expensive investments in those markets to guarantee sales.

In other instances, U.S. giants are taking advantage of tax holidays in Ireland or research incentives in Singapore to make products that are then shipped back to the U.S., which actually widens the trade deficit.

Pundits and politicians may rail at multinationals that

build plants overseas while shrinking capacity at home, but profits speak louder than words. Consider Colgate-Palmolive Co., which last year derived 68% of its operating profit from abroad. U.S. population growth and per-capita spending are flat compared with Asia. So Colgate is building a toothpaste factory in India and other plants in Thailand and Malaysia, where increasingly affluent consumers want Palmolive soap, shampoo, and dishwashing products. "Profitability is lower in the U.S.," says William S. Shanahan, Colgate's chief operating officer.

Likewise, PaineWebber Inc. estimates that Coke earns about 37¢ for every gallon of soda it sells in Japan vs. about 7¢ in the U.S. H.J. Heinz Co. enjoys profit margins of up to 20% on its baby food sales in Italy, compared with 5% in the U.S., according to John M. McMillin, an analyst at Prudential-Bache Securities Inc.

Whatever the impact on U.S. growth and trade, there's little question of future direction. "We could argue whether it's good or bad," says David G. Hartman, chief international economist for DRI/McGraw-Hill in Lex-

A SAMPLE OF FIRST-QUARTER PROFITS

The nation's top three long-distance phone companies posted sizable gains in first-quarter profits. AT&T's rose 21% on flat revenues, while archrival MCI more than doubled its profits to \$135 million, from \$58 million the year before, on a 33% jump in revenues. No. 3 U.S. Sprint, owned jointly by GTE and United Telecommunications, turned its first profit ever—\$27.5 million vs. a loss of \$124 million in last year's quarter. All benefited from strong demand for data services and cost-cutting.

Paper companies continued to make headlines. The standouts were International Paper, which recorded a 40% profit jump, and Temple-Inland, which fattened margins to 11.8% from an already impressive 10.7%. Time, Temple-Inland's former owner, took a \$15 million hit for expenses related to its pending merger with Warner Communications.

ABBOTT LABORATORIES	\$1
ADVANCED MICRO DEVICES	
ALCOA	2
AMERICAN BRANDS	3
AMERICAN CYANAMID	1
AMERITECH	2
AMR	2
AT&T	8
BELL SOUTH	3
BOISE CASCADE	1
BURLINGTON NORTHERN	1
CBS	
COCA-COLA	1
CORNING GLASS WORKS	
CPC INTERNATIONAL	1
CSX	1
DIAMOND SHAMROCK	
DOVER	
DOW JONES	
E-SYSTEMS	
FOOD LION	1
GANNETT	
GENERAL DYNAMICS	2
GENERAL ELECTRIC	11
GENERAL SIGNAL	
GM HUGHES ELECTRONICS	3
GOODRICH (B. F.)	
GRACE (W. R.)	1
GTE	4
HONEYWELL	1
IBM	12
INTEL	
INTERNATIONAL PAPER	2
KROGER	4
LILLY (ELI)	1

FOLLOWING THE MONEY OVERSEAS

	1988 non-U.S. operating income Millions of dollars	Increase from 1987 Percent	Non-U.S. income as percentage of 1988 total
COLGATE-PALMOLIVE	\$269.7	25.4%	68.0%
GENERAL MOTORS	3,564.1	83.9	52.9
GOODYEAR	563.6	22.8	56.2
GILLETTE	412.1	20.5	64.1
UNITED TECHNOLOGIES	614.8	21.9	49.7

DATA: COMPANY REPORTS; MONTHLY SECURITIES REVIEW

ington, Mass. "But we can't argue about whether it will continue." Clearly, the great global push of the 1990s has already begun.

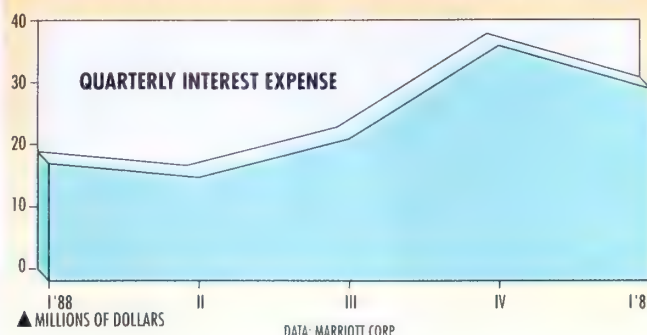
By William J. Holstein in New York, with bureau reports

BUYBACK BACKFIRES

Shareholders usually cheer when a company buys back its stock. In theory, a smaller amount of stock outstanding produces higher earnings per share as well as a loftier stock price. But Marriott Corp.'s latest quarterly results demonstrate that, like so many Wall Street ads, this juggling act isn't as simple as it seems. Marriott's use of floating-rate borrowings to finance the company's \$5 million-share buyback tarnished an otherwise bright quarter when interest rates spiked.

On an operating basis, Marriott did just fine: Business boomed at the big lodging, restaurant, and food-service company, yielding a quarterly rise in operating income of 3%. But the company eked

MARRIOTT'S BIG INTEREST BILL



out only a 2% increase in profits as net income rose to \$46 million on sales of \$1.8 billion. Its net profit margins actually shrank from 2.8% to 2.6%.

Marriott's operating income took a major hit from interest payments on the company's \$3.1 billion in outstanding debt—including borrowings to help finance a two-year stock-repurchase program. Since 1987, the company has spent about \$800 million on buybacks. The lower number of shares outstanding did help raise per-share earnings a nickel, to 41¢—a 13.8% jump.

But Marriott's stock has traded in a narrow range of about 30 to 33 for the past nine months—hardly the sort of reward shareholders might have expected.

With half of its loans at floating rates, Marriott felt the cold blast of the Federal Reserve Board's anti-inflationary policies. The company paid an average 9.6% interest on every borrowed dollar in the first three months—a third higher than the 7.2% average of 1988's first quarter. A rise in the cost of its floating-rate debt went a long way

toward pushing that average up. The result: A year ago, Marriott's interest expenses totaled \$19 million. For the first three months of 1989, the cost was \$31 million (chart).

Of course, the inflationary pressures that prompted the Fed to tighten also allowed Marriott to charge more for its hotel rooms and fast food. At Marriott's Courtyard chain of hotels, average room rates climbed to nearly \$60, a rise of about 5%. And the pressure on profits will ease if rates head down. Already, Marriott's interest payments for the first quarter dropped 18% from the \$38 million of the prior quarter, thanks to a decline in the company's outstanding debt.

If the Fed decides the economy has slowed enough to allow rates to drift back down, Marriott's bottom line should give shareholders something to cheer about in the second quarter. And who knows? Perhaps even Wall Street will notice.

By Tim Smart in Washington

	Profits		% chg.		Margins	
	\$ mil.	vs. 1988	1989	1988	1989	1988
1%	\$198.0	+15%	15.3%	14.5%		
5	10.1	-50	3.7	7.1		
6	276.0	+54	10.5	8.5		
1	172.2	+11	5.3	5.0		
7	89.0	+12	7.2	6.9		
1	300.8	+2	12.0	12.2		
1	101.1	+48	4.1	3.5		
3	594.0	+21	6.9	5.9		
6	449.6	+4	13.4	13.5		
1	52.2	+10	4.7	4.7		
1	33.2	-17	3.0	3.4		
1	56.3	+26	7.7	6.4		
1	259.8	+23	13.1	11.3		
1	41.1	+12	7.7	8.1		
1	67.7	+17	5.4	5.4		
1	77.0	+67	4.2	2.6		
1	14.9	+210	3.2	1.1		
1	32.1	-14	6.2	8.0		
1	200.0	+93	49.2	26.4		
1	19.1	+24	4.8	5.0		
1	28.7	+31	2.8	2.8		
1	74.9	+1	9.2	9.8		
1	75.4	-12	3.2	3.5		
1	849.0	+17	7.1	6.9		
1	19.8	NM	4.1	4.7		
1	172.9	-12	5.7	7.3		
1	53.0	+30	8.3	7.4		
1	30.3	+9	2.2	2.1		
1	329.0	+15	8.0	7.3		
1	62.9	+9	3.8	3.3		
1	950.0	+2	7.5	7.7		
1	97.0	+4	13.6	14.7		
1	223.0	+40	8.6	7.0		
1	-19.0	-147	-0.4	0.9		
1	284.7	+22	23.2	21.8		

	Sales	% chg.	Profits	% chg.	Margins	
	\$ mil.	vs. 1988	\$ mil.	vs. 1988	1989	1988
MANVILLE	508.3	+9	34.4	NM	6.8	7.3
MARRIOTT	1,786.0	+10	46.0	+2	2.6	2.8
McGRAW-HILL	416.1	+5	23.2	-14	5.6	6.8
MCI COMMUNICATIONS	1,500.0	+33	145.0	+150	9.7	5.1
MEAD	1,128.9	+4	52.6	-20	4.7	6.1
MERCK	1,571.4	+9	340.4	+25	21.7	18.9
MERRILL LYNCH	3,003.1	+25	37.2	-46	1.2	2.8
MORGAN STANLEY	1,238.8	+27	81.1	-18	6.5	10.1
MOTOROLA	2,175.0	+11	123.0	+8	5.7	5.8
NCR	1,250.5	-2	61.1	-18	4.9	5.8
NEW YORK TIMES	423.1	+1	31.5	-28	7.5	10.5
NORTHROP	1,280.0	-7	9.7	-93	0.8	10.2
OWENS-CORNING FIBERGLAS	665.0	+5	34.0	+21	5.1	4.4
PHILIP MORRIS	10,770.0	+45	590.0	+20	5.5	6.6
PPG INDUSTRIES	1,459.4	+6	129.8	+9	8.9	8.6
RAYTHEON	2,073.0	+6	120.8	+7	5.8	5.8
REYNOLDS METALS	1,445.2	+24	124.5	+78	8.6	6.0
RUBBERMAID	349.0	+16	+29.3	+14	8.4	8.5
SCOTT PAPER	1,268.9	+13	86.5	+17	6.8	6.6
SERVICE MERCHANDISE	565.4	+7	-4.4	NM	NM	NM
SHERWIN-WILLIAMS	464.8	+12	8.8	+5	1.9	2.0
SONOCO PRODUCTS	433.1	+15	24.6	+10	5.7	5.9
SQUARE D	431.3	+10	27.6	+1	6.4	7.0
TELEDYNE	1,116.3	+2	70.5	-53	6.3	13.6
TELERATE	122.7	+17	21.7	-8	17.7	22.6
TEMPLE-INLAND	462.6	+9	54.5	+20	11.8	10.7
TIME	1,136.0	+7	49.0	-26	4.3	6.2
TRIBUNE	552.9	+6	36.8	+14	6.7	6.2
TRW	1,785.0	-1	69.0	+5	3.9	3.7
TYLER	163.6	+7	-2.0	NM	NM	1.9
UNITED TECHNOLOGIES	4,500.0	+5	123.7	+1	2.7	2.8
UPJOHN	755.1	+14	103.0	+8	13.6	14.4
WARNER COMMUNICATIONS	1,445.7	+24	101.0	+47	6.9	5.9
WARNER-LAMBERT	1,019.7	+10	101.1	+21	9.9	9.0
WESTINGHOUSE ELECTRIC	2,887.2	+5	189.0	+5	6.5	6.6

NM = not meaningful

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

A SQUEEZE PLAY AT NORTHWEST

If the board doesn't move fast, Davis may get the airline

Will Northwest Airlines Inc. succumb to a supposedly friendly takeover? Billionaire Marvin Davis has not accompanied his \$90-per-share offer for the airline with the usual histrionics about inept managers who must go. In his published statements he fairly coos about his desire for a friendly deal. As for Northwest, after trying to ignore the whole issue, it has announced its intention to find a way to satisfy shareholders. Meantime, the stock has shot up to about \$99.

It seems clear that Davis has executed a squeeze play on Northwest's board. Davis may launch a tender offer soon, and he has said he will mount a proxy fight at Northwest's annual meeting on May 15. If the board does not come up with a proposal within a few weeks, Davis could carry the day—and the airline would be in the hands of an owner who earned a reputation as an asset-stripper at Twentieth-Century Fox Film Corp.

HEFTY DIVIDENDS? Davis' advisers say a bust-up is the last thing he would do. "NWA is a very nice company to finance. It has a phenomenal route structure, nice equipment, and good cash flow," says Josiah O. Low III, an investment banker at Donaldson, Lufkin & Jenrette



A NEW OWNER COULD RAISE CASH BY SELLING 220 PLANES AND LEASING THEM BACK

Securities Inc. working on the deal. Low says Davis could boost profits by improving Northwest's marketing, not by selling routes or delivery positions for planes. Northwest also owns 220 planes in its fleet that Davis could sell and then lease back to get more cash.

How Davis, an oilman and sometime Hollywood mogul, would improve Northwest's marketing is unclear. To avoid finding out, Northwest's chairman, Steven G. Rothmeier, will probably have to do a buyout himself for somewhere around \$105 a share. A hefty dividend payment might also ward off Davis.

The result will be a leveraged company whose prospective loss of financial

strength makes observers queasy. If other airlines have to take on such debt, says Salomon Brothers Inc.'s Julius Maltus, "the capital structures of the industry will be significantly impaired."

If Rothmeier had offered something to investors sooner, Davis might never have appeared. Last year, when Northwest stock was trading near 50, Pioneering Management Corp., a holder of 1 million shares, wrote Rothmeier to tell him the stock was undervalued and that he should boost the regular dividend sharply. The dividend stayed put. Now, Rothmeier will have to spend a lot more to keep Northwest independent.

By Christopher Power in New York

WHY MIKE MILKEN WAS SO EAGER TO HELP PETER UEBERROTH

Peter V. Ueberroth was the leading man in the recent drama at Eastern Air Lines Inc. But few people noticed that the carrier's would-be savior wasn't putting up any money to buy Eastern. Instead, the cash was coming from Drexel Burnham Lambert Inc., Texas Air's investment banker.

What was Drexel's motivation? Partly, ex-Drexel banker Michael R. Milken, who had been a friend of Ueberroth's for years, wanted to help both parties. But Drexel's own reputation was also on the line. All told, its name is on more than \$1 billion in stocks, bonds, and trust certificates it sold for Eastern, Texas Air, and its other carrier, Continental. If the Eastern imbroglio creates losses for holders of this paper, it would be one of the biggest

Drexel-funded deals ever to go sour.

"When any of our clients get into trouble, we try to help them out," says Frederick W. McCarthy, a Drexel managing director who has not been directly involved in Eastern. "Sometimes we even do *pro bono* work to protect our franchise in the bond market."

NO CASH. Drexel began funding Lorenzo in 1985. But last year, Milken says, he began suggesting to Lorenzo that he sell Eastern to Ueberroth, a longtime Milken buddy. Drexel put together the offer Ueberroth eventually made. Instead of Ueberroth putting up cash, Milken offered him a \$300 million bridge loan, which Drexel would have funded with junk-bond sales. Essentially, Drexel planned to buy Eastern from Lorenzo and hand it over to Ueberroth.

Drexel stepped in once again when Ueberroth and the unions were hammering out concessions. The unions griped that Ueberroth's deal didn't provide enough money to resurrect Eastern. Drexel banker Joseph Adams suggested that he could come up with \$365 million more, which would be secured by the proposed sale of Eastern's shuttle to Donald J. Trump. Adams also offered to help Eastern raise an additional \$200 million or so by doing sale-lease backs of its planes.

Now, Drexel, like Lorenzo, is back to square one. It isn't banging the table for a sale. But as one Drexel banker puts it: "It would be fine if someone walked in and could solve all the problems and buy the company."

By Aaron Bernstein in New York

WHO'S THAT SCREAMING AT EXXON? NOT THE ENVIRONMENTALISTS

amid building protest, they say the real culprit is dependence on oil

As the full horror of the Exxon Valdez oil spill sinks into the popular imagination, the public response has been swift. But you might be surprised by who's yelling—and who's not. Thousands of people who normally have environmental worries to others have risen in a bitter groundswell against Exxon Corp. Meanwhile, many major environmental groups are muting their criticism of the oil giant.

Groups such as Greenpeace U.S.A. and the Environmental Defense Fund don't argue that Exxon is blameless. But focusing on the company, they contend, critics ignore the real problem: U.S. dependence on oil. "Sure, you can't get a lot of the anger, but it's a little misguided," says Andrew Davis of Greenpeace. "Exxon isn't the problem. The problem is, we're far too dependent on oil."

Nonetheless, many Americans feel frustrated by Exxon's sluggish response to the disaster. And they're venting their feelings in an angry backlash reminiscent of the days of soaring prices and long gas-station lines.

Typical was the response of KSLX, a talk radio station in Los Angeles. The station's program director, Tom Yates, announced that Exxon had mishandled the cleaning of the mess, so he had the station recruit listeners to help clean the Alaskan shores. More than 1,200 folks led in to volunteer, and a plane load of them, courtesy of KSLX, is scheduled to fly to Prince William Sound on Apr. 22.

'VERY DISAPPOINTED.' Mutilating credit cards is probably the most popular—and noisiest—way of passing judgment and venting to the grandstands. Representative James H. Scheuer (D-N. Y.) stood on the House floor on Apr. 18 and cut his card in half. Countless radio-show hosts have encouraged similar action. New York's *Village Voice*, a left-leaning weekly newspaper, urged readers to return their cards to Exxon, "preferably enclosed in sealed plastic bags and with oil." The company says it has received about 6,000 cut-up cards so far, out of 7 million cards outstanding.

Boycotts, too, are picking up steam. In New York State, Suffolk County Executive Patrick Halpin ordered the 400 county employees with Exxon credit cards to surrender them. "Civilized society cannot permit these preventable ecological disasters to take place without demon-



EXXON'S RAWL: PROTESTERS HAVE HAD "ABSOLUTELY NO IMPACT" ON SALES SO FAR

strating to those corporations that this kind of behavior is simply unacceptable," Halpin wrote to Exxon Chairman Lawrence G. Rawl. The state legislatures of New York and Connecticut are sponsoring symbolic boycotts on May 2.

The protests aren't likely to injure Exxon. Rawl says they've had "absolutely no impact" on retail sales so far. And he feels "very disappointed" by customers who want to punish the company. "We had human error," and Exxon is doing

its best to clean the area, he says.

It's probably independent filling-station owners who most feel the lash of public resentment. Though many report business as usual, others say sales have fallen as much as 10%. A sniper fired at one station in Seattle, and several have received bomb threats. John W. Brandenburg, an Exxon franchise dealer in Denver, says that while one of his employees was wiping down a just-washed car, a motorist drove by, threw a handful of gravel at the auto, and yelled: "Clean up your oil spill!"

SHIFTING THE FOCUS. Some folks are also upset that Exxon's cleanup costs, which could run as high as \$500 million, are tax-deductible as a business expense. To address that complaint, Senator Harry Reid (D-Nev.) and Representative William Lipinski (D-Ill.) introduced a bill that would prohibit Exxon from writing off the costs until the cleanup is 100% complete and fulfills the requirements of the Clean Water Act and Superfund. Although the measure has little chance of passage, it may win its sponsors votes.

Environmental groups, meanwhile, are trying to shift the focus. In full-page newspaper ads, the Sierra Club jabbed at Exxon, but its main message was to discourage further development in the Arctic. Says a spokesman: "We're not supporting a boycott because we feel it was an accident of life. It's Exxon this time, but it could be any of the oil companies" next time.

The Environmental Defense Fund is also trying to use the spill to point the country away from oil. "Let's face it," says EDF senior attorney Joseph Goffman: "The Exxon Valdez is a very dramatic example of the true costs of fossil fuels." Environmentalists are hoping that Americans have finally learned that lesson.

By Andrea Rothman in New York, with David Castellon in Los Angeles and Sandra D. Atchison in Denver

HOLLYWOOD

THE MAN WHO WOULD BE MOGUL TRIPS UP IN TINSELTOWN

Many of Parretti's recent deals have fallen through—but he's undaunted

Italian financier Giancarlo Parretti has been the talk of Hollywood for months, since he claimed that he would spend at least \$800 million to create the world's largest entertainment and leisure empire. He started fast in late 1987, buying control of the troubled Cannon Group Inc., which he renamed Pathé Communications Corp. And he bragged at the Cannes Film Festival

that he was eyeing MGM/UA Communications Co. or another big studio. He even bought an interest in Madeo, a popular Italian restaurant in Hollywood.

Parretti's grand plans seem to have suddenly stalled, though, and many film executives speculate that the financier is having money problems. Parretti's finances have long been a mystery to outsiders, but over the past two months a

few of Parretti's most prominent deals have fallen apart.

Most notable was the Apr. 10 collapse of his agreement to buy New World Entertainment Ltd., a film and TV studio. Parretti had announced in February that he would pay \$138 million in cash and notes for New World. On Friday, Apr. 7, Revlon Inc. Chairman Ronald O. Perleman bid \$145 million. Parretti was in Brazil when New World told Pathé that it had until Monday morning to top Perleman. "We knew [Parretti] was low on cash and couldn't get to his banks that quickly," says a source who worked on the deal. New World paid Parretti \$3 million for voiding their agreement.

In April, Parretti also scaled back a production pact he struck two months earlier with former Cannon Chairman Menahem Golan. The original deal involved a \$160 million contract for 17 films from Golan over four years. The new version: Golan gets the rights to two films and a few small projects worth \$12.5 million. Parretti also dropped his \$22 million offer to take De Laurentiis Entertainment Group Inc. out of bankruptcy and has delayed acting on his letter of intent to pay up to \$12.5 million for 40% of another struggling studio, Kings Road Entertainment Corp.

Pathé has problems of its own. The studio has delayed paying interest due on \$55.6 million in bond debt and extended the repayment schedule of a \$128 million short-term bank loan incurred to buy back debt. On Apr. 3, Pathé reported operating losses of \$37.1 million for 1988 on revenues of \$371.1 million.

STILL SHOPPING. Parretti's camp claims money isn't a problem. The financier believed the New World and De Laurentiis assets weren't worth more than he bid, says Senior Executive Vice-President Fabio Serena, Parretti's top aide at Pathé. He's also negotiating to sell 172 European theaters, and partners have advanced Parretti \$90 million, Serena says.

The financier is still shopping in Hollywood, insists Serena: "We're looking right now to buy something else." But Parretti may have to go it alone. European media moguls Robert Maxwell and Silvio Berlusconi haven't yet bought into Parretti's Dutch-based holding company. No problem, says Serena: Parretti sought out Maxwell and Berlusconi for their knowledge of Europe's media markets—not for their money.

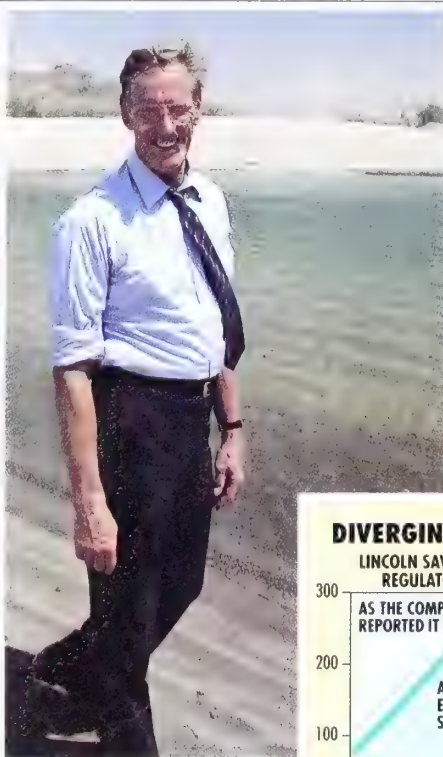
Serena shrugs off the recent setbacks. "We look at more than 50 deals a year," he says. "We couldn't make them all, or we would own the world." Perhaps, but Parretti's dream of a Hollywood empire may be slipping from his grasp.

By Ronald Grover in Los Angeles and John Rossant in Rome

BANKRUPTCIES

FOR CHARLIE KEATING, THE BEST DEFENSE IS A LAWSUIT

The feds want his S&L, but they'll have to brave a legal barrage



KEATING: SUING THE 'MALICIOUS BUREAUCRATS'

In the past year, as federal regulators swept the country taking control of ailing savings and loans, they have run across some colorful characters. There were Texas oilmen who bled their thrifts to buy fancy cars and California land speculators who loaded up on condos and private planes. But they have never run into the likes of Charlie Keating.

Charles H. Keating Jr. built a \$6.9 billion empire founded on Arizona real estate and Lincoln Savings & Loan based in Irvine, Calif., a wholly-owned subsidiary of his American Continental Corp. But when the feds threatened to swoop down and seize Lincoln, the shrewd, unyielding Keating unleashed a legal barrage that may tie up the Federal Home Loan Bank Board for months.

BUYING TIME. On Apr. 13, American Continental filed for Chapter 11 bankruptcy protection. That set off a chain of events. By 9 a.m. the next day regulators had seized the thrift. Then they wasted no time in asking the Justice

Dept. to launch a criminal investigation of Lincoln. Keating's response? He now is suing the regulators to get his thrift back—plus \$150 million in damages.

By all accounts, Keating is tilting at windmills. Regulators are given wide latitude to seize thrifts that they believe are being operated unsafely. Few courts are likely to stand in their way. But by taking American Continental into bankruptcy, Keating has insulated a huge chunk of the thrift's assets from seizure—and bought valuable time in which the company's outlook might improve.

At issue is as much as \$3.5 billion of thrift assets Keating included in his \$3.85 billion bankruptcy filing. Barred by law from putting the S&L in Chapter 11,

he did the next best thing by sheltering land, securities, and other assets owned by Lincoln subsidiaries. "It's pretty clear what was done," says M. Danny Wall, chairman of the FHLBB. "The subsidiaries were wrongfully included."

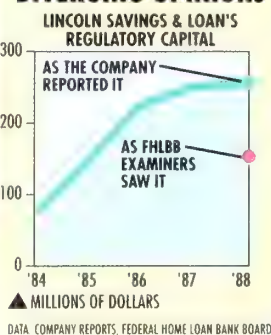
Federal regulators plan to ask the bankruptcy court to relinquish some Lincoln assets. Wall says he's concerned that Keating may have siphoned

off the thrift's assets to other American Continental operations. He also says he's heard reports that Lincoln executives trucked off van-loads of documents before the feds seized the thrift.

'OBSCENE.' Locking horns with Keating in legal matters is never an easy task. A self-styled battler, Keating has crusaded against pornography and abortion. He has fought the FHLBB over Lincoln's accounting and lending practices since he bought the thrift in 1984. Two years ago he got regulation of Lincoln shifted to Washington from FHLBB's San Francisco office. Blaming the seizure on "malicious bureaucrats," Keating calls it "an obscene thing to see a vigorous American enterprise destroyed and a caring family shattered."

Keating had been trying to sell Lincoln since late last year, after American Continental posted a \$36 million loss in the September quarter. When regulators rejected a proposed sale to former Cali-

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Top of the News

fornia Representative John H. Rousselot as insufficient, Keating's lawyers headed for bankruptcy court.

Although Lincoln was not technically insolvent, regulators worried that its assets were being "substantially dissipated" and believed its capital was lower than Lincoln claims (chart). Since last September, regulatory capital had shriveled from \$247 million to \$20 million, the FHLBB says. Regulators also were

alarmed by a \$214 million exodus of deposits from Lincoln since Jan. 1.

Judging by past marathon battles, Keating and the feds will be slugging it out for months to come. "It will be a very litigious proceeding," Wall predicts. The feds could try to get the bankruptcy judge to replace Keating with a more amicable trustee. Keating no doubt will fight that—to the bitter end.

By Kathleen Kerwin in Los Angeles

PHOTOGRAPHY



THE STRETCH 35: ITS SNAPSHOTS ARE TWICE THE WIDTH OF ORDINARY CAMERAS

PLAYING LEAPFROG IN DISPOSABLE CAMERAS

Will Kodak's waterproof and wide-angle cameras one-up Fuji?

An Eastman Kodak Co. engineer came back from a white-water rafting trip last summer with a dripping-wet disposable camera wrapped in a plastic bag. The film was almost ruined.

Not long afterward, in a focus group convened by Kodak marketers, one consumer expressed frustration that he couldn't capture the panoramic views of the Grand Canyon on his camera.

Those incidents begat new products that represent Kodak's latest moves in its game of one-upmanship with Fuji Photo Film Co.—the battle for disposable-camera buyers. On Apr. 18, Kodak unveiled the Weekend 35, a waterproof camera, and the Stretch 35, a camera that takes pictures twice the width of normal snapshots. For its part, Fuji has announced a new "throwaway" of its own. It has a telephoto lens.

Disposables come with film threaded

through them. When they run out of exposures, shutterbugs send in the whole camera for processing. Fuji, the Japanese photo giant that pioneered the business in 1987, still holds 75% of the \$150 million market. That's largely because it controls the vibrant Asian market, where 19 million of the cameras were snapped up last year, compared with just 2 million in the U.S.

WRINGING THE FLING. Fuji now is aiming squarely at the U.S. In February it launched a major advertising campaign to persuade Americans to take throwaways on trips where they don't dare risk their expensive cameras. But as the battleground shifts stateside, Kodak's marketing might should give it an edge.

Kodak already has become more quick-footed. Last spring the company rushed out an announcement of its first disposable, the Fling, to beat Fuji's U.S. invasion with its Fujicolor Quick Snap by

a matter of hours. And, as this spring's entries demonstrate, the Rochester (N.Y.) giant has cranked up new-product development.

When Kodak's Jerry Hargrave came home from his rafting trip with his soaked Fling, the company's six-member team of engineers and designers quickly started work on a waterproof camera. They had designed the original Fling on a 3-D computer-aided engineering system, so they used their free time fiddling with that design on the computer. Then they built a prototype using a special plastic housing with a molded viewfinder that a skin diver wearing a face mask might see through. On the back, they added a tear strip so the developer could quickly pull off the plastic coating to get to the film. Crows Alan V. Vandemoere, Kodak's product manager: "This is elegance and simplicity."

Producing the Stretch panoramic camera proved even simpler. Kodak engineers had already developed a lens that could take extra-wide pictures, but had decided the market was too small. They changed their minds when they began thinking disposable. A customer who wouldn't buy an expensive camera dedicated to panoramic shots, they reasoned, might buy a cheap throwaway to use at the Grand Canyon.

SAY 'MARSUPIAL.' Kodak's top management gave the go-ahead for the two products last October. The Weekend 35, which will sell for \$13.95 with 24-exposure 400 ASA film, is set to hit the stores in June. The Stretch, which will cost \$12.95 for 12-exposure 200 ASA film, is headed for a fall debut. The Weekend, especially, could do well. "We get a lot of customers who want something that goes underwater but don't want to pay the 100 bucks," says Ronald F. Stewart, a store manager at the Boston outlet of Underground Camera, a retail chain.

However, Fuji isn't sitting idly by. It offers throwaways with built-in flashes, and its products come in a myriad of clever packaging gimmicks. In one model available only in Japan, a little figure of a koala pops up and swings from side to side to catch a child's attention and draw a smile.

Kodak may soon overcome its biggest shortcoming by putting a reusable flash in some of its models so they can be used indoors. The flash would be collected from photofinishers and re-installed in new cameras. Another possibility is a close-up camera. With the market expanding and profit margins of more than 60%, compared with about 50% for conventional film, the one-upmanship is sure to go on.

By Leslie Helm in Boston, with Neil Gross in Tokyo

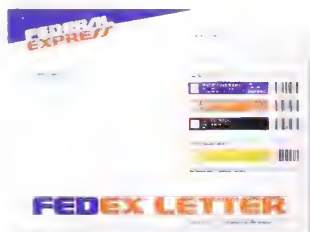
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ETHICS CLASSES FOR FUTURES TRADERS

► In a bid to preempt Congress and federal regulators, a special panel of the Chicago Mercantile Exchange on Apr. 19 proposed a ban on dual trading in its most active contracts. The Merc's board is expected to approve the changes by the end of May despite opposition from some exchange members.

Dual trading, a practice that allows floor brokers who execute orders for their customers also to trade for their own accounts, has resulted in repeated abuses in the trading pits and appears to be at the heart of the alleged wrongdoing uncovered by a two-year federal probe of Chicago's futures exchanges. The Merc's 10-member panel also recommended beefing up the exchange's surveillance staff and requiring all of its members to attend ethics classes.

THE LATEST IN A STRING OF BIOTECH MERGERS

► A weak market for biotechnology stocks and dwindling cash hoards are spurring a shakeout among gene-splicers. On Apr. 18 profitable Genzyme and struggling Integrated Genetics finally merged, confirming rumors that had swirled for months.

The \$24 million deal was the latest in a string of biotech mergers. Who's next down the aisle? Keep an eye on companies with overlapping product lines or research programs. The dozen startups formed to work on diseases of the brain, for example, might consider putting their heads together.

BANKAMERICA GOES SHOPPING, AGAIN

► BankAmerica will buy a small Nevada bank, its second acquisition in as many weeks.

The purchases signal a resurgence at flagship Bank of America. The turnaround at the bank is largely responsible for 1988 corporate profits of \$726 million, which follows cumulative losses of \$1.8 billion in the three prior years.

The acquisitions—the parent of Nevada First Bank, the state's fifth-largest, and tiny American Savings Bank of Tacoma, Wash.—cost BofA about \$95 million. They're the first since the California giant's 1983 purchase of Seafirst. Now BofA has to catch up with such rivals as Citicorp and Security Pacific, which have been buying actively in the West. BofA is now expected to pursue other small targets in Oregon, Arizona, and parts of California.

CARLYLE GROUP IS BECOMING A BIG DEAL

► Carlyle Group is doing a brisk business these days. On Apr. 19 the Washington investment firm, teaming up with outside investors and Coldwell Banker employees, completed a deal to buy Coldwell Banker Commercial Group from Sears Roebuck for approximately \$300 million. The same day, Fairchild Industries, which for months has fended off suitors, said it had agreed to consider a sweetened, \$212.5 million offer from Carlyle. On Apr. 12, Carlyle had bumped its all-cash offer for the aerospace

DON'T MESS WITH TEXAS TEETOTALERS

It doesn't pay to mess with your big brother. In 1985, developers bought the entire town of Buckingham, Tex. (pop. 150). They contracted with neighboring Richardson (pop. 75,000), to supply city services. Then the powers-that-be in Richardson, which is dry, got wind of the developers' plan to build liquor stores. As if that wasn't bad enough, rumors circulated that pornographic theaters weren't far behind.

Richardson struck back on Apr. 13. The city cut off Buckingham's police, fire, and ambulance services. City workers even removed speed-limit signs near Buckingham's school. Embarrassed Richardson officials later returned the signs. But Buckingham will have to hire its own police force and ambulance service. Undaunted, Town Secretary Shirley Leichsenring says, "We're determined to keep our independence." Of course, just about every Texas banker has said that before, too.



company from \$16.30 per share to \$17. Security Pacific National Bank will provide the financing, Carlyle says.

The higher bid may not swing the deal, though. Sources close to the situation say the offer is still "on the low side" of investment advisors' valuation of the company. And other buyers are said to be in the wings.

CABLE TV AND PHONE SERVICE ALL IN ONE?

► Canadian entrepreneur Ted Rogers is a step closer to becoming the first cable television operator in the world to offer local phone service. On

Apr. 17 his Rogers Communications, Canada's largest cable operator and the parent of Cantel, a cellular telephone company, said it would buy a 40% stake in CNCP Telecommunications, a telex company from Canadian Pacific for \$225 million.

Rogers wants to use CNCP's lines to compete for Telecom Canada's long-distance customers. Eventually, he plans to carry that phone traffic to local customers through his cable TV lines. He'll need government approval, though. And he'll have to fight Bell Canada's monopoly to get it.

AN OVERHAUL FOR THRIFT REGULATION

► Congress is moving quickly toward passage of a bailout of the savings-and-loan industry's deposit-insurance fund. On Apr. 19 the Senate voted 91-8 to pass a measure based on a Bush Administration plan that would provide \$50 billion to shore up the ailing Federal Savings & Loan Insurance Corp. and overhaul thrift regulation. A similar bill is pending in the House, where a vote may be scheduled as early as May. Legislators hope the bill can be enacted by early summer.



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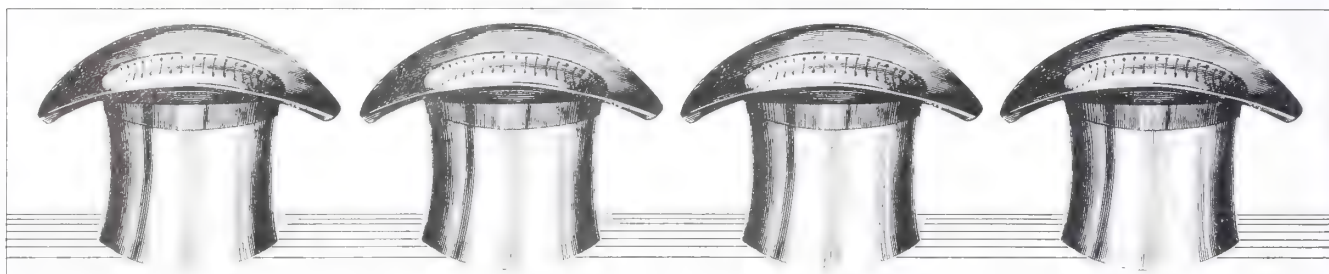
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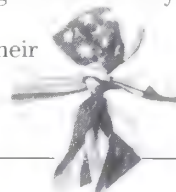
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HAS BUSH BLOWN HIS BEST CHANCE FOR PROGRESS ON THE DEFICIT?

As opening acts go, it wasn't boffo. The budget agreement announced by President Bush and congressional negotiators on Apr. 14 was greeted in Washington by hisses, catcalls, and cries of "fraud." And things may only get worse. By doing the bare minimum needed to meet the coming year's deficit targets, budgeteers have made the job of meaningful, long-term deficit reduction harder than ever.

The congressional leadership and Budget Director Richard Darman contend that by wrapping up the fiscal 1990 budget quickly and painlessly, they've established mutual trust and set the stage for more significant deficit-cutting measures. The most optimistic among them see talks on a big 1991 deal starting as early as June.

But many key lawmakers think the opportunity for serious action this year has passed. And the notion that either the White House or Congress will be more likely to take painful steps in an election year strikes many as farfetched.

RUFFLED FEATHERS. That's why some powerful Democrats are teeing off on the agreement. Senate Finance Committee Chairman Lloyd Bentsen (D-Tex.) refused to back the deal. The Finance Committee has jurisdiction over nearly half of the \$28 billion in deficit reduction. Others on the warpath include J. Bennett Johnston (D-La.), a senior member of the Senate Appropriations panel, and Senate Commerce Committee Chairman Ernest F. Hollings (D-S.C.). Some of this anger is a result of the hurt feelings of powerful lawmakers who were cut out of the action. But much of it is also frustration that Bush squandered the goodwill he had built up in three months of stroking congressional egos.

Trying to soothe all of these ruffled senatorial feathers may take months. That job will be tough because these budget veterans know flimflam when they see it. On paper, the deal limits the fiscal 1990 deficit by \$28 billion. But budget experts estimate that all but \$5 billion of the deficit reduction comes from accounting gimmicks and wishful thinking. An example:

The deal "saves" nearly \$1 billion by advancing a 1990 farm-subsidy payment into 1989.

Furthermore, it will take Congress most of the summer to turn the sketchy budget deal into legislation. For instance, the White House and lawmakers called for a \$5.3 billion tax increase—but didn't agree on where the new revenues might come from. A long, messy battle over details of the 1990 budget will make it tough to focus on '91.

SLIDING BY. What will the budgeteers talk about once they do sit down? Hopes for a broad multiyear agreement in round one fell apart because Bush wouldn't budge on his refusal to raise taxes. The Administration didn't push very hard for spending cuts, either. That made it easy for Congress to slide by.

There is still a longing on Capitol Hill for a big, long-term deal that would get the deficit issue off the table. But for that to happen, Bush must endorse a big tax hike in exchange for Democratic support for cuts in domestic programs, including a slowdown in Medicare spending.

Bush aides say it's too close to the 1988 election for the President to retreat from his no-tax pledge. But some hint privately that Bush will accede to the tax hikes when he feels the time is right. One possibility: The Administration must re-estimate the fiscal 1990 deficit in August. If it uses realistic economic assumptions, the budget agreement will fall short of its goal by billions of dollars. That could spur an inside-the-Beltway crisis that might give Bush the cover he needs to sign on to a tax hike.

But absent such a high-risk maneuver, or a sudden downturn by financial markets that now seem blasé about the deficit, it is hard to see why Bush would agree to a tax hike in the summer when he so steadfastly opposed one in the spring. And unless he has a change of heart, negotiations on the 1991 budget will be even less successful than the latest dismal exercise.

By Howard Gleckman



BUDGET CHIEF DARMAN

CAPITAL WRAPUP

HEALTH

Congress is ready to grant employers relief from some hated new tax rules on health benefits. But the move is splitting the business community. Small companies are delighted that House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) and a bipartisan majority of his panel are willing to push for a drastic simplification of the rules, known as Section 139. The complex requirements, part of the 1986 Tax Reform Act, are designed to make it hard for companies to offer more lucrative health benefits to top officials than to average employees. Under the Rostenkowski plan, busi-

nesses would be given an easy way to provide one plan for the bulk of their workers and more generous benefits for highly paid employees.

Big corporations, which have less trouble complying with Section 89 than their smaller brethren, fear the proposal could create a lot of new problems. Their major worry is that technical language in the law would make it harder to offer the popular "cafeteria plans." These schemes let employees pick and choose from among tax-exempt and taxable benefits. The Employers Council on Flexible Compensation, a lobbying group, is warning members that many cafeteria plans would become illegal under Rostenkowski's approach.

DEFENSE

Corporate lawyers view the Apr. 13 conviction of two Teledyne Electronics vice-presidents as a bad omen for top officials of companies implicated in the "Ill Wind" defense procurement scandal. U.S. Attorney Henry E. Hudson won the conspiracy and wire-fraud convictions even though he could not produce direct evidence that the executives knew that their consultants had bribed a Navy official. The Teledyne case was the first to go to trial, although 14 individuals and companies have pleaded guilty. Lawyers think indictments of senior officials of other contractors may be coming.



ASIA

THE ASIANS ARE BRACING FOR A TRADE SHOOT-OUT

On Apr. 30 the U.S. will issue a target list of unfair practices

Across the street from the White House, executives of a new South Korean airline toasted their \$1 billion purchase of planes from Boeing Co., while Seoul's top trade officials fanned out across Washington clutching their own shopping lists. Not to be outdone, Taiwanese officials arrived with a plan to shave the country's \$10.4 billion trade surplus with the U.S. by 10% a year. And Tokyo's top trade bureaucrat visited the U.S. capital to talk up Japanese imports of American products.

The reason for the diplomatic blitz: Japan and East Asia's premier trading nations believe that the U.S. is about to hit them with trade targeting. On Apr. 30, U.S. Trade Representative Carla A. Hills will issue a broad report on the unfair foreign trade practices used by most of the Asian exporters. Although India, Brazil, and member nations of the European Community are also involved, the majority of complaints that Hills is weighing are against Japan, South Korea, Taiwan, and Thailand. As required by a provision in last year's trade law—widely called “Super 301”—Hills will then use this report card to identify “priority” countries the U.S. wants to open up, and that will set off long and gruel-

ing negotiations with those countries.

Although the bureaucratic gears could grind away for as long as three years before any retaliation is ordered, the Asians are treating Washington's hit list as an indictment. “Once Japan is identified as a priority country,” says Takeshi Isayama, a director of Japan's Ministry of International Trade & Industry, “it will focus attention on Japan as ‘the enemy.’” If Hills follows through on even half the industry complaints, a surprisingly broad range of products could be put on the table. The Administration will then be required to measure the dollars-and-cents progress in selling them within specified time periods.

BIG-STICK TACTICS. For now, the increasingly prosperous Asians say that if they're named, they won't accede to U.S. demands. Government and business leaders in Tokyo, Seoul, Taipei, and Bangkok maintain that they've already cooperated enough to redress U.S. trade imbalances, and that for domestic political reasons they can't cave in. In Korea and Taiwan, for example, resentment of Washington's big-stick tactics may provoke a political backlash that could threaten other American interests. “If I am your friend and you use Super 301 against me, I

will resist,” one Taiwan official says.

But with some Asian nations exporting one-quarter to one-half of their output to the U.S., few in Washington take their bluster seriously. Administration officials see the flurry of last-minute pledges mostly as exercises in public relations, and in Congress, the Senate Finance Committee wants Hills to cite Japan as the foremost target country. Commerce Secretary Robert A. Mosbacher, noting that Korea, Japan, and Taiwan account for nearly half the U.S.

ASIAN TRADE BARRIERS THE U.S. COULD HIT

SOUTH KOREA Electronics, movies, film and cameras, fruit, candy, nuts, patent protection

JAPAN Electronics, telecommunications equipment, auto parts, film and cameras, construction services, rice, product distribution, patents

TAIWAN Movies, auto parts, electronics, rice, soda ash

INDIA Electronics, movies, film and cameras, patent protection

DATA: OFFICE OF THE U.S. TRADE REPRESENTATIVE

trade gap, emerged from a meeting with the Koreans on Apr. 17 to say: "Assurances are nice, but they don't mean much until you can see CIF: Cash In '85."

Asian trade officials say that such change takes time. Japan's bureaucrats point out that they have stoked up their domestic economy, appreciated the yen 100% since 1985, and are buying some 42 billion in American-made goods—about one-third more than previously. We think we're doing our homework," says one official at Japan's Foreign Affairs Ministry. Even so, Japan's \$50 billion surplus with the U.S. may actually be growing.

LACK OF COMPETITIVENESS. Taiwan also raised its currency 47% against the dollar since late 1985 and slashed import duties on thousands of products. Tariffs go into effect on July 1 on 4,000 items. The Koreans lowered tariffs and liberalized dozens of laws that discouraged imports, and on Apr. 8 said they would open their market to 243 agricultural and food imports over the next three years.

Although numerous trade restrictions still exist, Asian businessmen say American exporters are also at fault for not learning their languages and trying to sell goods they want. "U.S. businesses blame foreigners for their lack of competitiveness," says Young Soo-Kil, economist at the Korea Development Institute, when they often don't spend any time or effort to adapt their products to local tastes.

As the trade pressure rises, anti-Americanism is growing. In Thailand, Korea, and Taiwan, resentment of U.S. pressure is a palpable threat to governments. A growing number of Thais view cooperation with the U.S. on trade issues as national capitulation. Asks one Thai intellectual: "Who are the Americans to tell us what to read, to view, to do, and to consume?"

One irony not lost on the Asians is that the new U.S. trade policy borrows most from their own systems, which are plentiful examples of government-business trade coordination. The emerging "managed trade" approach means that over time Asian nations would be expected to increase imports of American goods to a fixed percentage if they wanted to continue selling in the U.S.

"We already have managed trade of a sort with the U.S. in autos, chips, textiles, color TVs," says Yoshio Nakamura, deputy director for international economic affairs at Keidanren, the association of Japan's big companies. "What do you want?" The answer from Washington is: results.

By Amy Borrus in Tokyo, with Laxmi Iyankar in Seoul, Dirk Bennett in Taipei, and Paul Magnusson in Washington

SOVIET UNION

'I'LL TAKE IT. WHAT IS IT?' THE SHOPPING SPREE IN RUSSIA

With the currency tanking, Soviets grab whatever goods they can get

Trading is brisk these days at Almaz, a jewelry store dating to prerevolutionary times on Moscow's Stolesnikov Lane. Customers plunk down 18,000 rubles—\$29,000 at the official exchange rate (table)—for a gold bracelet or diamond ring. "It doesn't make sense to save," says Rima Gromyeva, hunting for a silver pin. "It's better to spend—and the sooner the better. Everyone knows the ruble is falling in value." Indeed, a ruble, which the government says is worth \$1.63, now fetches only 7¢ on the illegal black market—a third of its street value only two years ago.

Fear that the government will officially devalue the ruble and jack up the prices of many goods is driving Soviet shoppers into a spending frenzy. Across the country even longer lines than usual are greeting buyers of such typically scarce items as toilet paper and soap. But Soviets are also sinking their savings into rugs, art, and jewelry. "There is simply no other place to put your money," says Olga Kieselova, who traveled 800 miles to shop in Moscow.

FUELING INFLATION. Soviet shoppers have no shortage of rubles to spend. Workers' average wages rose an estimated 8% last year, creating a mountain of 78 billion in spendable rubles. But with Soviet industry still unable to produce enough consumer goods, shoppers have little to buy. The buildup in cash is fueling inflation, which is running at 6% to 8%, estimates Washington consultant PlanEcon Inc.

Throwing a bone the consumers' way, the Kremlin plans to set up an emergency fund to import an additional 5 billion rubles' worth of Western consumer goods, including razor blades and pantyhose. But that will only postpone the problem. Economist Nikolai Shmelev argues that the government should double its net foreign debt, now \$24 billion, to finance a wave of Western imports.

Others argue that only freeing prices and making the ruble fully convertible into hard currencies will ease the short-

ages. But changing the Soviet price system is too explosive an issue to be undertaken just yet. Although prices for vegetables may be freed next year, full-scale reform of retail prices isn't likely until the mid-1990s.

Many observers say it will take until the end of the next decade to make the ruble fully convertible, but the govern-

THE SINKING RUBLE

	Dollars per ruble	
	Official	Black market
1986	\$1.47	\$0.23
1987	1.72	0.21
1988	1.64	0.10
1989	1.63	0.07

DATA: BAYERISCHE VEREINSBANK, BW ESTIMATE



SOVIET PHARMACY: RUBLES GET 7¢ ON THE BLACK MARKET

ment is quietly testing the waters. In March, the Soviet Bank for Foreign Economic Affairs allowed factories with hard currency earned from exporting to the West to auction the funds to other Soviet enterprises. At the secret sale, the ruble traded for just 9¢ to 10¢. Even so, the Soviets plan to hold regular auctions starting in May.

Such small steps won't stop the spending spree, and as shortages worsen, the government may be forced to make another big buy of Western consumer items just to have something on the shelves. For now, Soviets, who have heard too many promises of a better life, will keep stockpiling goods.

By Peter Galuszka in Moscow

THATCHER'S NEW REVOLUTION

A set of radical reforms worries even her staunchest supporters

On May 4, Margaret Thatcher, now the West's longest-serving political leader, will have spent an entire decade in power. To celebrate the extraordinary tenure—the longest for a British Prime Minister in this century—the Tory Party faithful plan a power luncheon at London's Carlton Club and cocktails at headquarters. But those who know Thatcher say she'll be a reluctant guest. The irrepressible politician, now two years into her third term, is likely to consider the festivities a bit tedious when there's so much of British society left to transform. Like Mao, says former Labor Chancellor Denis Healey, half-joking, Thatcher "believes in the permanent revolution."

Never mind that "Thatcherism" has now entered the vocabulary as the word of choice for a generation that looks to the market for all its answers. Never mind that the Prime Minister is near the top of any list of world leaders with clout. For Thatcher herself, there's only work to do.

Just as she once pioneered in reducing government's role in industrial policy, the Prime Minister is now pushing to turn the Britain of the early 1990s into a laboratory for right-wing social experiments. Thatcher is intent on injecting the free market into a wide array of welfare-state services, from education and health care to job training and prisons. She is extending state sell-offs into new areas, such as water supply, rail, even highways. And she has taken dead aim at entrenched interests, such as lawyers and doctors. By expanding her reach to these areas, says John Banham, director general of the Confederation of British Industry, Thatcher is attempting to "shift the frontiers of the public and private sectors."

'A LIT FUSE.' But if she was able to win backing for the first stage of her revolution, Phase II promises to be an uphill climb. This time, Thatcher is challenging sacrosanct institutions and deeply held views about the role of the state. Moreover, the middle class, the backbone of Conservative support, is a target of the reforms.

Already, Thatcher's proposals have touched off a firestorm. Parents of university students are worrying about having to pay school fees. Lawyers are waging a multimillion-dollar publicity campaign to defeat her plans to eliminate the two-tier legal system of solicitors and barristers. And the medical profession is unified in its opposition to Thatcher's scheme to introduce competition into the health system.

MORE EFFICIENT. In fact, the most contentious test centers on the National Health Service, which provides 90% of Britain with free medical care and is Europe's largest employer. Pollster Robert M. Worcester of Market Opinion Research International says health is "a lit fuse" for Thatcher that could explode into broad middle-class dissent if reforms don't improve the NHS.

Thatcher's aim is to make the NHS more efficient. Hospital waiting rooms are crowded, and some elective surgery can take years to schedule. The reforms would create an internal market within the state system, forcing hospitals to compete for government funds on the basis of costs and service. But the problem, say some experts, is not so much supply as demand. Britain spends just 5.9% of its gross national product on health care, about half the U.S. rate and much less than that of other European countries. New technology and rising expectations are pushing demand up much faster than government funding. Some fear that, in the interest of running more patients through the system, the would-be reforms could result in second-class treatment for long-term patients such as the mentally ill and the elderly.

Universities will also test Thatcher's resolve. Only 15% of students go on to

Now 10 years at the helm, she aims to bring the free market into social services—from education to prisons



university these days—less than half the U.S. rate—and the government wants that to reach 20% by the mid-1990s. But increased funding will have to come from students themselves and the private sector. University dons across the country, often disdainful of business, are having to swallow hard and plunge into fund-raising. Oxford University Vice-Chancellor Sir Patrick Neill complains that the government's reformist zeal has gone too far. "The market ethos is out of place in the world of higher education," he says.

Indeed, few social institutions escape the Thatcher blueprint. One pet idea of the Prime Minister's advisers is to get the government out of industrial training. There is talk of providing job-seekers with vouchers, funded by business and government, that would entitle them to college class work or on-the-job training. On the broadcasting front, Thatcher plans to auction local television franchises in 1992 to the highest bidders rather than grant them on the basis of programming and community service. Legendary state-funded British Broadcasting Corp. may become a subscription service when its charter expires in 1995.

Thatcher's scheme for lawyers, too, is touching a sensitive nerve in the Establishment. She considers the separation of solicitors and barristers a restrictive practice and wants to allow them to set up joint, American-style law firms. And to open the legal system to those who cannot afford to retain a lawyer, Thatcher would permit law firms to charge con-



THINGS TO DO

✓ Tame the unions

✓ Lower personal tax rates

✓ Sell off public housing

✓ Sell off state-owned industry

✓ Financial deregulation

Stem inflation

Streamline National Health Service

Cut back student aid

Privatize the BBC?

Make legal system like the U.S.'s

83% 40%

more to go!

a bit messy

more private care

have industry pick up tab

contingency fees for barristers

agency fees. But critics charge that the dependence of the system of barristers—bewigged lawyers who argue in the high courts on cases the solicitors refer to them—is at stake. That could add to poorer service for clients at higher costs, they say.

Surprisingly, even some British industrialists are ambivalent about the new wave of proposals. Many feel Thatcher forcing upon them new obligations arising from charitable and educational contributions to the financing of transportation and training. It is true that British companies have racked up steady earnings gains and repaired their balance sheets in recent years. But they face an array of economic pressures, from high interest rates to preparing for the intensified competition that Europe's open market will bring.

G BROTHERISM. Moreover, some industrialists complain that Thatcher has failed to keep up her implicit part of the bargain: Taxes have been rising, not falling. "She's abandoning whole areas to the private sector," argues Sir John H. Harvey-Jones, former chairman of Imperial Chemical Industries PLC. "Companies are in better shape, but [now] they have burdens to face elsewhere."

Executives also complain that the country's roads and rails are creaking under the weight of increased traffic and cuts in government subsidies. The Confederation of British Industry estimates that a hefty \$25 billion should be spent over the next few years to overhaul the century-old systems that were

designed to serve the colonial empire. But now the future is with Europe, and the economic risk is clear: Britain could lose out on the new trading patterns come 1992.

There's a paradox in Thatcher's reformist crusade. While she purports to be unleashing market forces and individual freedom, critics charge, the Prime Minister is trampling on civil liberties. Thatcher has cracked down on press freedom, imposing prior restraints on publication of defense, terrorism, and international affairs stories deemed to be against the public interest. It is illegal, for example, to broadcast interviews with the Irish Republican Army's legal political arm, Sinn Féin.

Some educators argue that by tightening control on education budgets, Thatcher is treading on academic freedom, effectively picking winners and losers among university departments. Those that can't meet new budget and quality standards will be closed. Technical schools are now forced to indicate to government the relevance of their courses to industry and the role commerce plays in funding them.

WARNING SIGNS. As yet neither the Labor Party nor any other opposition has mounted an effective challenge to Thatcher. But the Tories cannot afford to ignore some flashing danger signs, especially as elections loom, scheduled for no later than 1992. Hard-won economic gains are being eroded by interest rates of 13% and an inflation rate of 7.9%, both the highest among industrial-

ized countries. Planned sell-offs of electricity and especially water utilities are generating unprecedented opposition from environmentalists and consumers. The chasm between the haves in the Southeast and the have-nots in the Rust Belt of the North remains. Admits Tory Party Chairman Peter Brooke: "We are fighting on slightly more fronts than we intended."

But Thatcher has taken on the nay-sayers and overcome enormous obstacles before. Only eight years ago the British economy seemed hopelessly mired in ruin, its managers defeated and its unions ascendant. That was before tough economic medicine and labor laws wrung out the inefficient and brought unions to heel. Putting Britain atop the industrial world's growth league this decade, coupled with determination to press ahead against public opinion, have been Thatcher's hallmarks. Says the Conservative Party's Brooke: "The Prime Minister is peculiarly free of the British disease of finding reasons for not doing something."

On the eve of her 10th anniversary, Thatcher may be facing a watershed for Britain and for herself. Until now, even as people grouse about her economic policies, they have overwhelmingly supported her at the polls. But as she imposes her will on the country's very personal way of life, Britons may begin to question just how far they want to go with the Thatcher revolution.

By Richard A. Melcher, with Mark Maremont, in London



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SUDDENLY, THE BUSINESS OF ANGOLA'S BUSINESS

In Luanda, Angola's run-down capital, carpenters and mechanics are hanging out signs advertising their skills, while private-car owners cruise the streets as free-lance taxi drivers. These stirrings of individual enterprise reflect the efforts by the Marxist ruling party, the Popular Movement for the Liberation of Angola (MPLA), to salvage the country's battered economy by trying to revive a market system. Like Poland and Hungary, it is looking to the West for trade and investment. Through its only successful economic sector, oil, Angola has kept close links to the U.S. all along. Within a few months, Angola expects to reinforce ties to the West by joining the International Monetary Fund and World Bank.

But those moves haven't eased Washington's official hostility toward Luanda, which so far has done little to liberalize its political system. The U.S. cannot block Angola's entry into the IMF because Europeans support it. However, the Bush Administration intends to keep sending messages to the National Union for the Total Independence of Angola (Unita), led by anticommunist rebel Jonas Savimbi, to try to force the ruling party to take Savimbi into a coalition government. But President José Eduardo dos Santos and other MPLA leaders calculate that a reviving economy and growing business links with the U.S. will strengthen their hand to settle the civil war on their terms, not Washington's. They will be aided by last December's U.S.-mediated agreement providing for the withdrawal of South African and Cuban troops from Angola and for Namibia's independence from South Africa. The end of fighting along the Angolan-Namibian border will allow the Angolans to open offshore areas to oil companies along their southern coast. Off the northern coast, fields operated by Chevron Corp., Texaco Inc., and other companies already produce 480,000 barrels per day. The new acreage will attract eager bidders because "Angola is a world-class province," says a U.S. oil company executive. "It is one of the last non-OPEC opportunities."



ANGOLAN VILLAGERS

To offset U.S. conservatives' support for Savimbi, Angola is working to establish more business links with politically well-connected Americans. One such venture is the 5% stake taken by Boston-based Citizens Energy Corp. in offshore acreage operated by Continental Oil Co. Citizens, a nonprofit venture set up by Representative Joe Kennedy II (D-Mass.) to lower oil costs to consumers, is now run by his brother Michael. Luanda also heeded the advice of former Congressional Black Caucus Chairman Mervyn M. Dymally, who told Angolan officials that doing business with African-Americans is important in winning their support. Dick Griffey, chairman of Hollywood's Solar Records Inc. and a leading political fund-raiser, traveled to Luanda with Dymally and recently made a deal to buy Angolan oil.

IMPORTED DIAMONDS. Angola's most influential new partner is Maurice Tempelsman, chairman of Lazare Kaplan International, a big U.S. diamond importer. Lazare received its first shipment in March under a contract to import \$20 million worth of Angolan diamonds, and Tempelsman said the agreement should lead to more "mutually beneficial examples of economic cooperation between our two countries." Tempelsman also has long-standing ties to the MPLA's worst enemy in black Africa, Zairian strongman Mobutu Sese Seko, who allows U.S. arms shipments to Savimbi through Zaire. What's more important for Angolans, though, is that Tempelsman has been an influential voice on African policy under Democratic and Republican Administrations since the 1960s. He chairs the nonprofit African-American Institute, which promotes closer U.S.-Africa ties with funds partly from U.S. aid agencies.

For Angola, the MPLA hopes, such an improvement in relations with the U.S. should result both from expanding business links and from its shift toward private enterprise. The more capitalist Luanda's government looks, the less reason for Washington to try to change it.

By Steve Askin in Harare

GLOBAL WRAPUP

BRAZIL

The Brazilian Democratic Movement Party (PMDB), Brazil's biggest, splits breaking up at its Apr. 29-30 convention, slated to name the party's candidate for the November presidential election. The PMDB, a hodgepodge of interests, has been hurt by its support for unpopular President José Sarney.

Leaders fear that the PMDB's natural candidate, Ulysses Guimarães, the 72-year-old party president and Chamber of Deputies leader, would be a disaster at the polls. In a dispute over alternative candidates, rival factions threaten to bolt the party. So far, only Orestes Quércia, the 50-year-old São Paulo

state governor, has emerged as a possible compromise candidate.

On the right, for lack of alternatives, the leading candidate is likely to be the eccentric, unaffiliated former President Jânio Quadros. In the runoff of November's two-stage election, voters may face a choice between leftists: Workers Party leader Luis Inácio "Lula" da Silva and the Democratic Labor Party's firebrand Leonel Brizola, the former governor of Rio de Janeiro.

AUSTRIA-HUNGARY

Vienna and Budapest, dual capitals of the old Austro-Hungarian Empire, are linking up again as likely sites of the first world's fair to be held si-

multaneously in two cities—and the first in the East bloc. The Paris-based International Bureau of Expositions is expected to authorize the two capitals to sponsor a joint fair in 1995.

For Budapest, the fair is part of Hungary's opening to the West, while Vienna sees it strengthening the city's role as a gateway to the East. Consultant Bechtel Inc. estimates that the fair will draw 10 million visits to exhibits in each of the cities, which are 90 miles apart.

One possible innovation: A passport allowing visitors to spend scrip at both sites to avoid problems of exchanging hard and soft currencies—Austria's schilling and Hungary's forint.

IS THE BOSS GETTING PAID TOO MUCH?

FOR THE FIRST TIME, THE AVERAGE TOTAL TAKE TOPPED \$2 MILLION

Scrooge McDuck, Walt Disney's irascible version of Charles Dickens' miserly Ebenezer, never sat in Walt Disney Co.'s boardroom. If he had, Chairman Michael D. Eisner and President Frank G. Wells might not have become the highest-paid professional managers in the history of American business. And Disney might not be doing so well.

For orchestrating a turnaround of Disney, the pair earned far more money in a single year than the legendary likes of IBM's Tom Watson Jr. or General Motors Corp.'s Alfred P. Sloan Jr. earned during their tenures as heads of American business institutions. Eisner pulled down \$40.1 million in total compensation, while Wells garnered \$32.1 million.

NEW HIGHS. Those huge sums—the bulk of which result from the exercise of stock options—put the pair at the top of BUSINESS WEEK's 39th annual executive compensation survey. Corporate leaders—not entrepreneurs who built huge companies—were the big winners in 1988, from former RJR Nabisco chieftain F. Ross Johnson to the heads of Bristol-Myers and Ralston Purina. While their numbers may pale in comparison with the \$550 million made in 1987 by junk-bond king Michael R. Milken of Drexel Burnham Lambert Inc., they nonetheless establish a new standard for corporate pay.

With the help of Standard & Poor's Compustat Services Inc., BUSINESS WEEK surveyed the two highest-paid executives at 354 companies—708 executives in all. The biggest surprise: For the first time ever, the average salary and bonus for the CEO topped the \$1 million mark, and the average total compensation jumped to more than \$2 million. The survey

found that the average CEO's salary and bonus rose 17%, to \$1,128,854. That increase is more than double the 8% hike in 1987 and over three times the 5.1% gains by middle managers and professional employees.

Add in the value of exercised stock options and other long-term pay, and the boss's average total compensation climbed to \$2,025,485, up 14% over last year and far in excess of 1988's inflation rate of 4.4%. Indeed, last year 350 executives out of the 708 surveyed entered the Million Dollar Club by earning total compensation of more than \$1 million.

Corporate chieftains didn't only set new records on the pay scale. They also established new highs in golden parachutes. Johnson left RJR Nabisco as chairman in February with a package of pay, stock, and benefits that comes to \$53.8 million—well above the previous record set in 1988

by Revlon Inc. Chairman Michel C. Bergeron, whose parachute unfurled \$35 million in pay and perks.

PRIZE STEER. In an analysis linking CEOs' pay with performance during a three-year period, BUSINESS WEEK and Compustat found that Allen Bornstein, chairman of Amax Inc., and R. Lee Taylor II, chairman of Holly Farms Corp., gave their shareholders the biggest bang for the buck (page 48). Chrysler Corp.'s Lee Iacocca and Panhandle Eastern Corp.'s Robert D. Hunter delivered the least (page 50).

And then there's J. Hugh Liedtke, chairman of Pennzoil Co., and Baine P. Kerr, a Pennzoil director and former president. Each received \$10 million bonuses for their "exceptional and extraordinary services" during the company's legal fracas with Texaco Inc. Pennzoil ultimately won a \$7.5 billion jury award and settled for \$3 billion last year, doubling Pennzoil's net worth.

"Ten million dollars is not much when you're talking about a \$3 billion settlement," says Allen H. Carruth, a Penn-



MICHAEL D. EISNER

By reversing Disney's dismal fortunes, he made his own, raking in \$40.1 million in salary, bonuses, and stock options

oil director. Carruth likens the figure to bidding on a prize steer at a cattle show. You don't haggle over decimal points, he says, getting to the \$10 million figure. "That's an easy figure to remember," he says. "Up front, straight, and clear. They did a helluva good job, and we wanted to show them."

That's exceptional performance recognized by exceptional reward. In fact, Pennzoil executives and those at many other companies could be considered underpaid when you compare their compensation with stars in fields such as sports, movies, or dealmaking. Take heavyweight champion Mike Tyson, who cashed in rivals' heads to the tune of \$54 million last year, or Drexel's Milken, who got about \$200 million in 1988 (page 51).

Sharp performance gains had a lot to do with this year's big jump in executive pay. Corporate profits soared by 32% in 1988—their strongest

growing in years—and most companies paid their CEOs accordingly. Executives also exercised bundles of stock options to take advantage of a 28% maximum tax rate on ordinary income last year—down from 38.5% in 1987. Income from options—earned on shares granted for performance—aver as many as 5 to 10 years—propelled every executive into the 25-highest-paid list with one exception: Paul Fireman, chairman of Reebok International Ltd., made the list for the third consecutive year thanks to a mammoth cash bonus.

The system is obviously working the way it should—higher profits equal higher pay. Maybe too well? Over the past decade, attention has been focused on how to better link pay with performance. No one argues that the CEO who delivers for shareholders should not share in the success.

But it is fair to ask what is "reasonable" or "fair" pay for a job well done. In 1960, at the virtual height of what was to be the American century, the U.S. businessman stood as a leader in the world. He commanded vast respect and sometimes fear from his global competi-



F. ROSS JOHNSON

He broke the record set by former Revlon Chairman Bergerac for golden parachutes by walking away with \$53.8 million in pay, stock, and benefits

THE 25 HIGHEST-PAID EXECUTIVES

	Company	1988 salary and bonus	Long-term compensation	Total pay
		Thousands of dollars		
1. MICHAEL D. EISNER , Chmn.	Walt Disney	\$7506	\$32588	\$40094
2. FRANK G. WELLS , Pres.	Walt Disney	3778	28357	32135
3. E. A. HERRIGAN JR. , Former Vice-Chmn.	RJR Nabisco	1280	20450	21730
4. F. ROSS JOHNSON , Former CEO	RJR Nabisco	1836	19235	21071
5. MARTIN S. DAVIS , Chmn.	Gulf & Western	3673	12577	16250
6. RICHARD L. GELB , Chmn.	Bristol-Myers	1475	12578	14053
7. WILLIAM P. STIRITZ , Chmn.	Ruiston Purina	1029	11919	12948
8. BAINE P. KERR , Chmn., exec. comm.	Pennzoil	10706	839	11545
9. J. HUGH LIEDTKE , Chmn.	Pennzoil	10872	664	11536
10. PAUL FIREMAN , Chmn.	Reebok Intl.	11439	—	11439
11. JAMES D. ROBINSON III , Chmn.	American Express	2764	8169	10933
12. KENNETH H. OLSEN , Pres.	Digital Equipment	932	9052	9984
13. DONALD E. PETERSEN , Chmn.	Ford Motor	3340	6579	9919
14. JOHN SCULLEY , Chmn.	Apple Computer	2479	7013	9492
15. DEAN L. BUNTROCK , Chmn.	Waste Mgt.	1400	7002	8402
16. PAUL B. ROONEY , Pres.	Waste Mgt.	1060	6425	7485
17. P. ROY VAGELOS , Chmn.	Merck	1608	5286	6894
18. JOHN H. BRYAN JR. , Chmn.	Sara Lee	1367	5396	6763
19. ANDREW S. GROVE , CEO	Intel	684	5746	6430
20. STEPHEN M. WOLF , Chmn.	UAL	575	5790	6365
21. JOHN E. LYONS , Vice-Chmn.	Merck	908	5414	6322
22. JOSEPH D. WILLIAMS , Chmn.	Warner-Lambert	1310	4814	6124
23. LOUIS V. GERSTNER JR. , Former Pres.	American Express	2394	3564	5958
24. JOHN H. STOOKEY , Chmn.	Quantum Chemical	1429	4454	5883
25. STANTON R. COOK , CEO	Tribune	1064	4789	5853

THE 10 LARGEST GOLDEN PARACHUTES

	Company	Reason for payment	Total package
			Thousands of dollars*
1. F. ROSS JOHNSON , CEO	RJR Nabisco	Leveraged buyout	\$53800
2. E. A. HERRIGAN , Vice-Chmn.	RJR Nabisco	Leveraged buyout	45700
3. GERALD TSAI JR. , Chmn.	Primerica	Commercial Credit takeover	46800
4. EDWARD P. EVANS , Chmn.	Macmillan	Maxwell takeover	31900
5. KENNETH A. YARNELL , Pres.	Primerica	Commercial Credit takeover	18400
6. JOHN D. MARTIN , Exec. v-p	RJR Nabisco	Leveraged buyout	18200
7. SANFORD C. SIGOLOFF , Chmn.	Wickes	Leveraged buyout	15900
8. WHITNEY STEVENS , Chmn.	J.P. Stevens	West Point-Pepperell takeover	15700
9. PHILIP L. SMITH , Chmn.	Pillsbury	Grand Metropolitan takeover	11000
10. WILHELM A. MALLORY , Sr. v-p	Wickes	Leveraged buyout	7500

* Includes final salary, bonus, long-term compensation, certain retirement benefits, and estimated future annuity payments as well as parachute

DATA: COMPANY REPORTS, STANDARD & POOR'S COMPUSTAT SERVICES INC., BUSINESS WEEK ESTIMATES



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tors. For this premium performance, the big company CEO got premium pay. On average, he drew down a \$190,383 paycheck—41 times the average pay of the factory worker, 38 times the \$4,995 made by the average school teacher, and 19 times the engineer (page 52).

RESENTMENT. That gap has widened dramatically. In 1988, the CEO's record \$2,025,485 compensation was 93 times an average factory worker's \$21,725, 72 times a teacher's \$28,008, and 44 times

an engineer's \$45,680. "We're not talking about gods here," says Audrey Freedman, a Conference Board economist. "We're discussing relative rewards in society for needed work."

Five years ago management guru Peter F. Drucker warned that the widening gap was fomenting resentment among other professionals and managers. Drucker's concern prompted one company—innovative furniture maker Herman Miller Inc.—to impose a maximum cap

on CEO pay. At Herman Miller, the CEO's total pay can't exceed a fixed multiple of 20 times the pretax income of its manufacturing employees. Not many companies followed that lead, however, and many consultants pooh-pooh the change.

"Executives who make a million or more a year are really in an elite group of maybe 600 to 700," says Louis J. Brindisi Jr., chairman of Management Compensation Group. "You're paying for the stewardship of hundreds of billions of

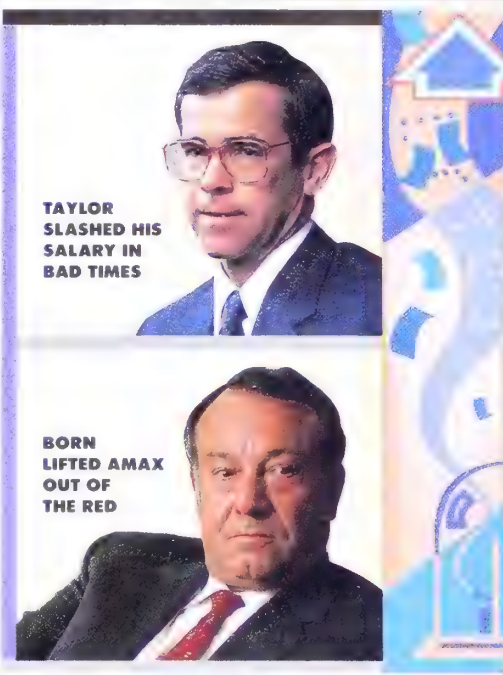
SHAREHOLDERS SAY 'THANKS' TO THESE CEOs

Holly Farms' R. Lee Taylor II, the third generation of his family to head the poultry producer, doesn't go in for a lot of frills. He tools around Memphis in the family station wagon. At the noon hour you're more likely to find him taking a seven-mile run than hosting a power lunch.

Taylor gets paid chicken feed by today's standards—a total of \$816,000 over the past three years for running a company with \$1.8 billion in annual sales. Partly because of that low pay, Taylor is one of two chief executives who gave shareholders the most bang for the buck among the 354 companies in *BUSINESS WEEK*'s pay-performance analysis. The other is Allen Born, chairman of Amax Inc.

RECORD EARNINGS. Taylor delivered the largest return in stock appreciation and dividends to shareholders relative to his salary. A \$100 investment in Memphis-based Holly Farms Corp. three years ago is worth \$208 today. By engineering a turnaround at Amax, Born, 55, emerged as the executive who earned the least relative to his company's earnings. Since 1986, Born has taken home \$2.9 million in pay while restoring Amax to profitability and leading it to record earnings.

While observers say Taylor is a capable manager who keeps an eye on the bottom line, most of the recent gain in Holly Farms' stock to 61% can be attributed to a bidding war for the company between Tyson Foods Inc. and ConAgra Inc. On Apr. 17, Taylor terminated a merger pact with ConAgra after his shareholders rejected a board-approved takeover by the Omaha food processor.



Wall Street is betting that Taylor will lose his company to rival chicken producer Tyson. "It's ironic that a shareholder-driven man will be walking the street," says Prudential-Bache Securities Inc. analyst John M. McMillin.

Even without hostile bidders, analysts say Taylor set the stage for a rebound that would have sent Holly Farms' stock into the mid-50s. A successful advertising campaign featuring actress Dinah Shore has helped Holly capture an 18% share of the grocery market. Taylor has cushioned the cyclical swings of Holly's core poultry business by emphasizing value-added products such as oven-roasted chickens. He has also diversified into flour milling and institutional beef and pork.

Taylor, 47, isn't one for excuses. When the poultry industry's salmonella scare aggravated Holly's overproduction problems in fiscal 1988, ended May 31, Taylor told stockholders the 56% decline in

profits was "mostly our fault." He then slashed his salary 13%, to \$262,000. This year's earnings are expected to hit a record \$82.5 million.

Born of Amax insists that he's not underpaid and that his compensation is based on performance. In 1985, the year Born rejoined Amax after turning around Placer Development Ltd. of Canada, "no bonuses were paid whatsoever," he says. That year, Amax posted a loss of \$621 million, on top of three years of red ink amounting to more than \$1 billion.

'SHOOT IT.' Born took to heart the adage: "If you can't fix it, sell it. If you can't sell it, shoot it." He found buyers for Amax's phosphate and lead businesses and closed down its nickel and copper mining and copper refining operations. He targeted aluminum, gold, and coal for expansion and downsized the company's presence in molybdenum, an ore that yields an alloy used to harden steel.

Born sold off businesses where Amax failed to hold a competitive advantage and used the proceeds to bring down debt and invest in areas with greater potential. The strategy paid off. Amax edged back into the black in 1986 with net earnings of \$14 million. Aided by a \$164 million gain from the sale of Amax's interest in two aluminum smelters, 1988 earnings soared to a record \$741 million. This performance prompted Amax's board to give Born a bonus last year equal to his \$600,000 salary, though Born is now predicting a drop in earnings for this year.

While both he and Taylor don't bring in the big money, they're hardly hurting. Born holds options on 170,000 shares of Amax stock that may someday turn into big bucks. And Taylor owns more than 223,000 shares in Holly Farms valued at \$13.7 million. He can afford to earn chicken feed.

By Dean Foust in Atlanta and Monica Roman in New York

TAYLOR AND BORN BOTH WATCHED THE BOTTOM LINE. NOW THEY'RE SPREADING THE WEALTH

ollars in assets. When you compare CEOs to mediocre short-stops who are making \$1 or \$2 million a year, how can anyone complain?"

PIG-OUT. Moreover, life at the top of a big corporation today is fraught with risk and uncertainty. In the 1960s, the chief executive held his job as long as he wanted it. He didn't have to worry much about global competition or corporate raiders, and the board wasn't likely to fire him. "Today, the risk of failure is incredible," adds Brindisi. You can lose your company, your job, and the jobs of thousands of employees."

Still, there are serious questions about CEO pay. "Not only are CEOs more richly compensated today than 20 years ago," suggests Graef S. Crystal, a leading consultant on executive pay. "If you think the pretax numbers are wild, the take-home pay has been absolutely explosive." In 1960 the maximum tax rate was 91% vs. 1988's meager 28% top rate. The upshot? The 30 brought home only 11 times more than the school teacher in 1960. But last year his take-home pay was 66 times greater. Some longtime observers of executive pay are predicting a public backlash—partly because any companies continue to give top executives fat increases while slashing blue-collar and managerial payrolls. Says Jude Rich, president of compensation experts Sibson & Co.: "The huge sums made by Milken and me others are again arousing the ire of the common person."

When Ford Motor Co. disclosed the compensation of its top executives on Apr. 10, union leaders denounced the multimillion-dollar pay as the "annual executive pig-out"—even though Ford has paid more than 2,200 in profit-sharing to the average factory worker since 1983. "On the one hand, they [executives] say that intense reign competition requires sacrifice, strain, and discipline," complains Steven F. Bieber, president of the United Auto Workers. "Yet they then turn around and demonstrate none of those qualities by awarding themselves more personal compensation for a year's effort than could be spent in several lifetimes."

Why did executive pay grow so fast? Since 1960 armies of compensation consultants have devised numerous stock and bonus plans that partly disguise the true earnings of top management. In the

PAY FOR PERFORMANCE: WHO MEASURES UP . . . AND WHO DOESN'T

There is no foolproof method of comparing executive compensation with performance, but BUSINESS WEEK's two measurement systems offer useful benchmarks. One relates corporate pay to total shareholder return. The other relates pay to return on equity and change in return on equity. All data are for the three-year period ended Dec. 31, 1988. Here are the chief executives whose pay and performance rank them among the best and worst.

EXECUTIVES WHO GAVE SHAREHOLDERS THE MOST FOR THEIR PAY...

		1986-88		
		Total pay* (\$000)	Shareholder return**	Index***
1. R. LEE TAYLOR II	Holly Farms	\$816	108%	254
2. DWIGHT H. HIBBARD	Cincinnati Bell	1930	238	175
3. WM. T. McCORMICK JR.	CMS Energy	1863	225	174
4. ROBERT E. PRICE	Price	686	7	156
5. BERT BALLENGEE	Southwestern Pub. Serv.	821	27	154

...AND THOSE WHO GAVE SHAREHOLDERS THE LEAST

1. LEE A. IACocca	Chrysler	\$41930	38%	3.3
2. MICHAEL D. EISNER	Walt Disney	50201	136	4.7
3. JOHN H. GUTFREUND	Salomon	9452	-40	6.3
4. JAMES D. ROBINSON III	American Express	16648	9	6.5
5. PAUL FIREMAN	Reebok Intl.	39916	173	6.8

EXECUTIVES WHOSE COMPANIES DID THE BEST RELATIVE TO THEIR PAY...

		1986-88		
		Total pay*	Avg. return on equity	Index***
1. ALLEN BORN	Amax	2904	18.6%	1827
2. DAVID S. TAPPAN JR.	Fluor	1939	-2.0	379
3. JOHN D. ONG	B.F. Goodrich	3224	9.8	203
4. WALTER F. WILLIAMS	Bethlehem Steel	2035	1.8	184
5. MORTON L. MANDEL	Premier Industrial	1052	24.7	184

...AND THOSE WHOSE COMPANIES DID THE WORST

1. ROBERT D. HUNSUCKER	Panhandle Eastern	2204	-17.2	-100
2. WALTER J. MCCARTHY JR.	Detroit Edison	1392	5.3	-59
3. RICHARD A. CLARKE	Pacific Gas & Elec.	1523	6.4	-22
4. JAMES L. KETELSEN	Tenneco	3068	-1.3	-13
5. JOSEPH J. PINOLA	First Interstate	4254	-3.7	-12.5

*Salary, bonus, and long-term compensation paid for entire three-year period

**Stock price at the end of 1988, plus dividends for three years divided by stock price at the end of 1985

***See glossary on page 52

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC

dense language of the proxy statement, most shareholders have trouble deciphering how much income these complex plans will eventually generate. By and large, a budget-conscious public has held the salaries of teachers in check. The chief executive has kept the lid on the pay of middle managers and factory workers. But the boss often helps to set his own pay in concert with the compensation committee of the board of directors.

CONFLICTS. While a flurry of lawsuits over mergers and acquisitions has forced boards to be more responsive to shareholder concerns, few stockholders sue boards for granting the boss excessive compensation. Like the golden retriever anxious to deliver the duck to his master, the committee is often just as

eager to award the boss a contract with more commas added to a number. "The committee is often the handmaiden of the CEO," says Crystal, who helped Disney design Eisner's package. "It always seems to want to please. You get into this hero-worshipping mode where people say, 'If we don't give him a lot of money, it could show we don't have confidence in him.' They aren't exercising real vigilance."

Although "comp" committee members acknowledge the sensitive role they play, some have found themselves in positions where conflicts of interest can emerge. Gerald Tsai, former chairman of Primerica Corp., is among the 10 executives who reaped the biggest and most controversial golden parachutes last year. On Primerica's compensation



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committee sat Joseph Califano Jr., former Health, Education & Welfare Secretary. Yet, Califano's law firm, Dewey, Ballantine, Bushby, Palmer & Wood, received \$5.2 million in legal fees and expenses from Primerica in 1987 and continued to work for the company last year. Califano did not return repeated phone calls.

Primerica's compensation panel first adopted golden parachutes for six executives in 1985 and expanded coverage to

others in 1987. Last year the company revised them yet again, three months after Primerica agreed to a friendly merger with Commercial Credit Corp. Why the turnabout? The company asserts it reduced the size of the parachutes. A shareholders' class action, however, raises a different possibility. The suit charges that the original plan provided Primerica executives with parachutes only under a hostile takeover, a condition excluded by the revised agree-

ment. The suit claims that the 10 executives were paid a total of \$98.2 million under the golden parachutes at a cost of about \$1.88 a share. A Primerica spokesman declined comment.

A likely candidate to lead next year compensation derby is Warner Communications CEO Steven J. Ross. Warner's proposed merger with Time Inc. gains approval, Ross may collect as much as \$50 million under his existing controversial employment contract. The

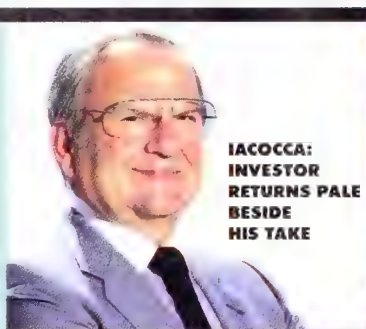
THE LIST NOBODY WANTS TO BE ON

Price competition and restructuring costs hurt profits at both Chrysler Corp. and Panhandle Eastern Corp. last year—and the paychecks of their chief executives took a fall. But not enough to keep Chrysler Chairman Lee A. Iacocca and Panhandle Chairman Robert D. Hunsucker from topping a list of executives whose pay most outpaced their companies' performance over the past three years.

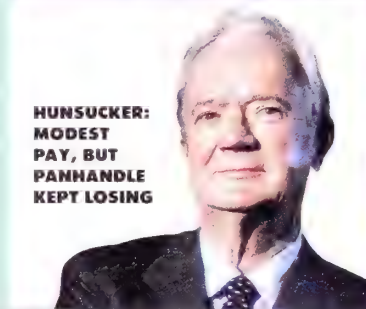
According to BUSINESS WEEK's pay-performance analysis of 354 chief executives, Iacocca and Hunsucker delivered the least for the money. Iacocca's pay was the highest based on return to shareholders since 1986, while Hunsucker earned the most relative to his company's financial performance.

REVVED-UP R&D. Neither man is new to the least-for-the-most club. Iacocca is the first executive to gain the dubious distinction of leading this list for a second consecutive year. He has collected \$41.9 million in salary and stock options since 1986. Shareholders who bought \$100 worth of Chrysler shares then would now have \$138 in stock and dividends. Hunsucker, 64, made his first appearance in 1987 by taking home the most in relationship to Panhandle's financial results. He pocketed a modest \$2.2 million over the past three years, while the Houston-based pipeline company lost more than a half-billion dollars during the same period.

What Hunsucker hasn't yet been able to achieve is a dramatic turnaround, the likes of which made Iacocca assume his place beside Horatio Alger in American business folklore—with a little help from a best-selling biography. His payoff for sav-



**IACOCCA:
INVESTOR
RETURNS PALE
BESIDE
HIS TAKE**



**HUNSUCKER:
MODEST
PAY, BUT
PANHANDLE
KEPT LOSING**

ing Chrysler from bankruptcy in the early 1980s was a bundle of stock options and bonuses that made him one of the highest-paid executives ever.

Chrysler managed to boost its share of the U.S. car and truck market by nearly two points, to 14%, in 1988, partly thanks to the first full year of Jeep sales since its acquisition of American Motors Corp. in 1987. But despite a 21% gain in revenues, Chrysler's net income declined 18.6% in 1988, to \$1.05 billion. A company spokesman says the earnings decline is partly the result of "heavy investments that will make Chrysler competitive long after [Iacocca] has retired" in 1991.

Chrysler is investing nearly \$3 billion a year in products and plants. It boosted spending for research and development by 25% last year and is building a \$1.5 billion research center. Last fall, Chrysler and Mitsubishi Motors Corp. opened a jointly owned assembly plant in Normal, Ill., to

build the sporty Laser coupe.

Unlike Iacocca, Hunsucker's face is not on display at bookstores around the world. Still, he is well-known within his industry and is currently playing white knight for Texas Eastern Corp. in its fight against a hostile takeover by Coastal Corp. Wall Street already is furrowing its brows because Panhandle would assume roughly \$2 billion of Texas Eastern debt at the same time it's shelling out \$3.2 billion in cash to complete the deal. The acquisition could threaten Panhandle's \$2-a-share dividend.

Some analysts question whether a company that has made money in only one of the past three years should be spending its cash on acquisitions. Like its rivals, Panhandle has been clobbered by plunging natural gas prices and by deregulation that has pushed pipeline companies into fierce competition. Panhandle suffered a net loss of \$157.1 million last year as revenues dropped 19.3%, to \$1.26 billion.

'DEVASTATING.' Despite the red ink, Panhandle's compensation committee gave Hunsucker incentive bonuses totaling \$232,000 tied to his performance during 1986 and 1987. A Panhandle spokesman acknowledges that the company's financial results present "a devastating picture" but says Hunsucker kept Panhandle together when other companies might not have survived. In such a pressured job, Hunsucker's pay was "moderate," he says.

With the help of higher gas prices and some marketing savvy, Hunsucker might turn Panhandle around and prove he's worth the bucks he has been paid. As for Iacocca, Chrysler will have to make its big investments pay off to bring the company's performance into line with his compensation.

By Todd Vogel in Houston and Wendy Zellner in Detroit, with Monica Roman in New York

**DUBIOUS
DISTINCTION:
ONCE AGAIN,
IACOCCA
RETURNED THE
LEAST VALUE
FOR HIS PAY**

contract was approved in 1987 after being recommended by Warner's compensation committee headed by William J. vanden Heuvel. Vanden Heuvel is a partner at Stroock & Stroock & Lavan, which receives fees for performing legal work for Warner. Vanden Heuvel also received a finder's fee of nearly \$1 million from Warner in 1984 for helping the company locate a buyer for Warner's cosmetics unit. "He obviously didn't feel there was a conflict, and the whole com-

pensation committee voted on the contract," said a spokesman for Warner.

Compensation consultants, often eager to please clients, also have contributed to the spiraling pay. They typically serve up studies showing average industry pay levels as a starting point to award higher compensation to a company's chief executive. Too often compensation is a function of how much others in the same industry get rather than how well a CEO does on the job. "We're

supplying the statistics that show the median level of pay in any given industry," says Gordon D. Wolf, of Towers Perrin Forster & Crosby. "You don't find too many companies that want to pay below the median, and you don't need a PhD in statistics to know that the median always goes up."

Counters Alfred Rappaport, a professor at Northwestern University's Kellogg School of Management: "To put all the blame on consultants is just a cop-

IN THIS RING, MIKE TYSON IS A WIMP

It was just another lively classroom debate—the kind that Teacher of the Year Mary C. Bicouvaris is known to spark in her government classes at Bethel High School in Hampton, Va. This time, "Mrs. Bic" was advocating a pay hike for members of Congress. But her students weren't buying it.

"I was almost kicked out of the room," she recalls. "My students somehow feel it's more acceptable for a football star to make more money than a congressman or the President of the country."

STUNNING. So it goes. In an America in which the Teacher of the Year makes slightly less than \$35,000 in annual salary, the stars of entertainment and sports routinely pull down millions. And if the seven-figure pay packages of luminaries in the business world numb, the eight- and nine-figure compensation of Wall Street's stars truly stun.

The very meaning of compensation has changed since the recent disclosure that Drexel Burnham Lambert Inc.'s Michael R. Milken made an astounding \$550 million in 1987—that's more than the total pay and bonus collected by all the 339 chief executives in the BUSINESS WEEK Executive Pay Scoreboard for that year.

Of course, Milken could lose \$1.1 billion—his total pay between 1984 and 1987—if the federal government wins its case to seize his assets. Even last year, when Milken spent upward of six months working on his defense against alleged securities fraud, he raked in an estimated \$200 million—mainly his percentage of fees billed by Drexel's junk-bond department.

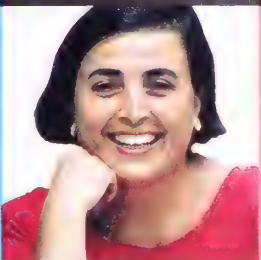
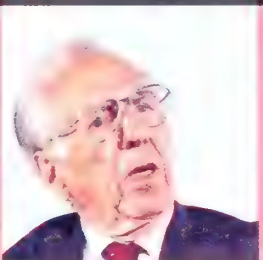
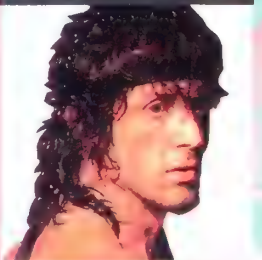
Wall Street dealmakers today are accumulating as much if not more wealth

than Hollywood stars. Henry Kravis masterminded Kohlberg Kravis Roberts & Co.'s record \$25 billion leveraged buyout of RJR Nabisco Inc. last year. His estimated \$100 million-plus income in 1988 makes comedian Eddie Murphy's \$25 million or Sylvester Stallone's \$20 million seem puny. Even producer-director Steven Spielberg, who creates some of Hollywood's biggest-grossing movies, made only \$50 million last year.

Jack Nash isn't a name on the public's lips, but he pulled in just as much

last year. As one of the highest-paid union leaders, he collected an estimated \$350,000 in 1988—more than four times the United Auto Workers' Owen F. Bieber.

Ultimately, people make what the market will bear. If L.A. Dodgers' pitcher Orel Hershisser helps fill stadium seats, he's worth every bit of the estimated \$4.3 million he is expected to make in income and endorsements this year. "These people, whether executives, entertainers, or athletes, can command whatever the market will

 \$34,800 Mary V. Bicouvaris Teacher of the Year	 \$350,000 William J. McCarthy Teamsters' president	 \$20,000,000 Sylvester Stallone Actor
 \$50,000,000 Steven Spielberg Movie producer/director	 \$54,000,000 Mike Tyson Heavyweight champion	 \$200,000,000 Michael R. Milken Indicted junk-bond king

as Spielberg. Head of Odyssey Partners, Nash is one of Wall Street's savviest arbitrageurs. Theodore Forstmann of Forstmann Little & Co., another well-known leveraged buyout house, probably made \$30 million to \$50 million last year.

Even Mike Tyson's \$54 million take in 1988—more than \$20 million of it from his fight against Michael Spinks—doesn't quite seem the same. Never mind William J. McCarthy, who took over as president of the Team-

pay them," says Brent M. Longnecker, a compensation consultant with Peat Marwick Main & Co. "But somewhere down the line, they have to deliver for someone to make a profit. Otherwise, they won't make that kind of money again."

That logic would make a lot of sense to the students in Mrs. Bic's class. As for her: "It's beyond my imagination how anyone can make \$1 million in a year when the President only makes \$200,000."

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out. Ultimately, it's management's responsibility. But as long as you have boards sitting at the behest of management and consultants who create incestuous data bases, everyone will get paid a premium."

'IN THE BALLPARK.' Nonetheless, an intriguing dynamic gets played out in the boardroom when it is time to set the CEO's pay. Consider the story behind the \$12.6 million in restricted stock that Gulf & Western Inc. Chairman Martin S. Davis got last year. In 1983, Davis was named chairman after the death of Charles G. Bluhdorn. In offering him a new contract, the board's compensation committee toyed with the idea of granting Davis 250,000 shares of restricted stock. The group eventually settled on 150,000 shares, then valued at \$4 million.

But after Disney upped the ante by awarding Eisner and Wells such lucrative contracts, the committee added an extra 100,000 shares to Davis' kitty a year later. "A new plateau was established for us competitively," explains Samuel J. Silberman, chairman of G&W's compensation committee. "You have to be in the ballpark. Everybody seems to

THE GROWING GAP BETWEEN CEO PAY AND WHAT OTHERS MAKE

1960

Engineer \$9,828
Schoolteacher \$4,995
Factory worker \$4,667
CEO \$190,383

1970

Engineer \$14,695
Schoolteacher \$8,635
Factory worker \$6,944
CEO \$548,787

1980

Engineer \$28,486
Schoolteacher \$15,970
Factory worker \$15,022
CEO \$624,996

1988

Engineer \$45,680
Schoolteacher \$28,008
Factory worker \$21,725
CEO \$2,025,485

DATA: BUSINESS WEEK EXECUTIVE PAY SURVEY, BUREAU OF LABOR STATISTICS



es and a spate of stock options.

With earnings down and raiders circling, the board was eager to entice the pair. It offered contracts that included a piece of the action—for Eisner, an annual cash bonus equal to 2% of Disney's net income in excess of a 9% return on equity. That clause alone resulted in a \$6.8 million bonus last year when Disney's ROE hit 25%.

"I had no idea that it would turn out like it has," admits Raymond L. Watson, former company chairman and a Disney director. "But then I didn't think that our stock would be trading at four or five times what it was when they came in, either."

Even so, couldn't they be recruited to Disney without offering carrots bigger than Mickey Mouse's ears? "If you're asking whether we could have gotten them for a 1% bonus instead of 2% or fewer stock options, I don't really know," says Watson. "But I know that no one is complaining." Not even Scrooge McDuck.

By John A. Byrne in New York, with Ronald Grover in Los Angeles, Todd Vogel in Houston, and bureau reports

COMPENSATION SCOREBOARD GLOSSARY

For years compensation gurus have debated whether executive pay correlates with corporate performance. Some critics say there is little or no relationship between what the boss gets and how his shareholders fare. Other experts say that over the long term the system usually works.

In this Scoreboard, BUSINESS WEEK, with Standard & Poor's Compustat Services Inc., attempts to come up with some answers. The study examines the relationship between pay and performance in two ways: It compares an

executive's total compensation with his company's total return to shareholders in stock appreciation and dividends over three years. A second comparison measures pay vs. corporate profitability for the same period. Three years of data are examined to minimize the impact of single-year windfalls in pay.

The Scoreboard companies boast market values that are among the 500 largest in the latest BUSINESS WEEK Top 1000 for which 1988 compensation data are currently available. Each company is assigned to one of nine

industry groups, from financial services to telecommunications. Then each executive's pay, his company's total return to shareholders, and his company's profit record are measured against the others in the group.

Performance ratings are given to executives only when three years of data are available. On a scale of 5, 1 indicates the best pay-performance ratio and 5 indicates the worst. Ratings are distributed so that 15% of the sample receives a 1, 25% a 2, 30% a 3, 20% a 4, and 10% a 5.

1986-88 PAY-PERFORMANCE ANALYSIS

PAY VS. SHAREHOLDERS' RETURN

Total compensation is the sum of an executive's salary, bonus, and long-term compensation for the three years.

Value of \$100 invested is the yearend 1988 value of a \$100 investment in the company made three years earlier, including both share-price appreciation and dividends.

Rating shows how an executive stacks up against his industry peers, measured in terms of pay relative to total return to shareholders. The rating is based on an index in which the value of the investment at the end of the three-year period is divided by an executive's total pay and then compared with other executives in the same industry group.

PAY VS. CORPORATE PROFIT

ROE is the company's average return on common equity over the three-year period.

Change in ROE is the improvement or decline in an index that relates the company's profitability to total pay through 1986-88.

Rating shows how an executive compares with his industry peers in pay for company profitability. The rating is based on an index that provides equal weight to the company's overall ROE as well as its improvement or decline during the past three years. Both these measurements are divided by an executive's total pay and then compared with others in the same industry grouping.

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
AEROSPACE (INDUSTRIAL: HIGH TECH)											
BOEING	16962.0 11.4	F. Shrontz, chmn. & CEO M. T. Stamper, vice-chmn.	846 633	15 5	206 517	2684 3076	124 [3]	[2] [3]	11.6	-12.4	[3] [4]
GENERAL DYNAMICS	9551.0 19.7	S. C. Pace, chmn. & CEO H. F. Rogers, pres. & COO Shares of restricted stock awarded: chmn., 8,200; pres., 4,600.	1041 701	-4 40	0 209	2874 NA	78 NA	[3] NA	14.0	-29.3	[3] NA
LOCKHEED	10590.0 17.9	L. O. Kitchen, chmn. & CEO V. N. Marafino, v.-chmn., CFO & CAO	1146 677	38 22	0 0	3182 2061	92 [3]	[3] [3]	20.2	-32.6	[3] [3]
MARTIN MARIETTA	5727.5 26.6	N. R. Augustine, chmn. & CEO C. B. Hurtt, pres. & COO	839 682	23 18	0 199	3392 2630	123 [3]	[3] [3]	25.3	-23.5	[2] [3]
MCDONNELL DUGLAS	15069.0 11.0	J. F. McDonnell, chmn. & CEO G. A. Johnston, pres.	681 565	20 NA	0 0	2529 NA	111 NA	[2] NA	10.4	-16.3	[3] NA
PARKER HANNIFIN	2397.3 12.4	P. G. Schloemer, pres. & CEO P. S. Parker, chmn.	765 520	16 14	1156 3101	3604 4636	119 [4]	[3] [4]	12.3	-15.1	[3] [4]
UNITED TECHNOLOGIES	18000.1 13.7	R. F. Daniell, chmn. & CEO E. W. Large, exec. v-p	1148 663	6 3	0 0	3392 2981	104 [3]	[3] [3]	9.2	-9.9	[4] [4]
AIRLINES (TRANSPORTATION)											
AMERICAN AIRLINES	8824.3 15.4	R. L. Crandall, chmn., pres. & CEO D. J. Carty, sr. v-p & CFO Shares of deferred (unvested) stock granted: sr. v-p, 50,000.	1000 450	5 NA	290e 116	3950 NA	130 NA	[3] NA	11.2	-0.3	[3] NA
DELTA AIR LINES	7323.4 14.5	R. W. Allen, chmn. & CEO R. Oppenlander, vice-chmn. & CFO	457 390	14 10	595 929	2260 2719	137 [3]	[1] [3]	10.6	-27.8	[3] [4]
UNITED AIRLINES	8981.7 50.0	J. C. Pope, exec. v-p, CFO & treas. S. M. Wolf, chmn., pres. & CEO *Includes \$375,000 reimbursement of forfeited compensation at employment. **Reimbursement for forfeited stock options.	717* 575	NA NA	0 5790**e	NA NA	224 NA	NA NA	16.8	NA	NA NA
APPLIANCES & HOME FURNISHINGS (CONSUMER PRODUCTS)											
ARMSTRONG WORLD INDS.	2680.3 16.1	W. W. Adams, chmn. & pres. R. H. Caldwell, sr. exec. v-p	496 387	32 9	0 0	1408 1190	168 [1]	[1] [1]	16.1	15.2	[1] [2]
FRIGIDAIRE	1885.6 27.0	D. J. Krumm, chmn. & CEO† J. A. Schiller, sr. v-p & CFO† Shares of restricted stock granted: chmn., 39,276; sr. v-p, 13,092.	898 351	3 12	0 16	2841 967	114 [1]	[2] [1]	28.5	-3.5	[1] [1]
WHIRLPOOL	4421.4 12.2	D. R. Whitwam, chmn. & CEO G. E. Wardeberg, vice-chmn.* *Resigned 2/10/89.	563 294	21 -16	0e 0e	1512 1574	113 [2]	[1] [2]	13.6	-19.2	[2] [3]
AUTOMOTIVE (CONSUMER PRODUCTS)											
CHRYSLER	35472.7 13.8	L. A. Iacocca, chmn. G. Greenwald, vice-chmn. Shares earned out under Long-Term Incentive Plan: chmn., 7,056; vice-chmn., 5,112.	1466 1084	-16 -18	2027 0	41930 10366	138 [5]	[5] [5]	20.0	-64.3	[5] [5]
FORD	5190.2 16.9	G. B. Mitchell, chmn. & CEO S. J. Morcott, pres. & COO; chmn.-sub.	888 445	34 42	536 124	4190 1485	158 [1]	[2] [1]	14.0	22.3	[3] [2]
GM	3468.5 19.6	J. R. Stover, chmn. & CEO S. R. Hardis, vice-chmn., CFO & CAO	1144 631	22 17	417 298	4299 2887	140 [3]	[3] [3]	16.5	18.9	[3] [3]
ORD MOTOR	92445.6 24.6	D. E. Petersen, chmn. & CEO† H. A. Poling, vice-chmn. & COO†	3340 2551	-10 -9	6579e 1517	17984 17507	287 [5]	[4] [5]	23.9	20.1	[4] [5]
GENERAL MOTORS	120387.7 13.0	R. B. Smith, chmn. & CEO R. C. Stempel, pres. & COO	2483 1733	49 55	2007 611	8935 NA	140 NA	[4] NA	11.1	-4.6	[5] NA
JAVISTAR	4113.3 32.6	J. C. Cotting, chmn., pres. & CEO N. A. Springer, chmn., pres. & CEO-	717 632	12 9	45 37	1739 1578	63 [3]	[2] [3]	NA	NA	NA NA
ACCAR	3267.4 19.4	C. M. Pigott, chmn. & CEO J. M. Dunn, pres.	885 605	15 14	0 0	3589 1943	197 [2]	[2] [2]	13.6	90.6	[2] [2]
BANKS & BANK HOLDING COMPANIES (FINANCIAL SERVICES)											
CITICORP	2734.5 16.7	J. B. McCoy, chmn. G. R. Slater, vice-chmn.; chmn.-sub.	997 592	19 NA	136 421	2590 NA	116 NA	[2] NA	15.4	3.5	[2] NA
BANK OF BOSTON	5295.6 16.4	W. L. Brown, chmn. I. Stepanian, pres. & CEO Shares received under MIP: chmn., 7,245; pres., 4,348.	1200 1176	37 85	0 0	4868 2484	128 [3]	[3] [3]	10.3	26.1	[3] [3]
BANK OF NEW YORK	2620.4 16.5	J. C. Bacot, chmn. & CEO-Co. & Bank P. Herrick, pres.; COO-Bank Shares of restricted stock granted: chmn., 6,640; pres., 3,750.	950 645	11 15	752e 449e	3730 2370	123 [3]	[3] [3]	13.6	10.3	[3] [3]

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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
BANKAMERICA	10181.0 14.2	A. W. Clausen, chmn. & CEO R. M. Rosenberg, vice-chmn. Shares of restricted stock awarded: chmn., 25,000.	1500 975	94 40	0 0	NA NA	113	NA NA	-14.7	NA	NA NA
BANKERS TRUST NEW YORK	5851.3 18.5	C. S. Sanford, Jr., chmn. P. M. Hampton, vice-chmn.† Deferred (unvested) shares awarded: chmn., 12,998; vice-chmn., 8,665.	1750 1350	0 0	284 274	5925 4634	109	4 5	11.3	21.5	4 4
BARNETT BANKS OF FLORIDA	2545.7 15.5	C. E. Rice, chmn. & CEO A. D. Ernest, Jr., pres. & COO	936 461	11 10	441 188	3310 1721	123	3 2	15.4	-2.4	3 2
CHASE MANHATTAN	12364.6 23.9	W. C. Butcher, chmn. T. G. Labrecque, pres.	1458 1068	32 34	110 340	5220 3628	96	4 4	2.3	88.9	4 4
CHEMICAL BANKING	7644.0 22.7	W. V. Shipley, chmn.-Corp. & Bank T. S. Johnson, pres.-Corp. & Bank Shares awarded from Performance Incentive Shares: chmn., 3,500; pres., 2,625.	1382 991	138 120	114 86	3234 2373	86	3 4	-1.0	60.0	4 4
CITICORP	32024.0 19.3	J. S. Reed, chmn. H. H. Angermueller, vice-chmn. Shares of restricted stock granted: chmn., 60,000.	1798 1086	114 92	0 0	5363 3854	120	4 4	5.0	34.9	4 4
CITIZENS & SOUTHERN CORP	2089.7 16.2	B. A. Brown, chmn. & CEO† H. M. Chapman, pres.†	805 544	30 19	0 129	2032 1861	135	1 2	15.3	-3.5	2 2
CORESTATES FINANCIAL	1629.7 16.2	T. A. Larsen, chmn., pres. & CEO F. Heldring, vice-chmn. Shares awarded under performance unit plan: chmn., 1,200; vice-chmn., 1,715.	763 467	67 21	224 301	1976 2633	140	1 3	15.6	32.3	2 3
FIRST CHICAGO	4815.5 24.7	B. F. Sullivan, chmn.-Corp. & Bank R. L. Thomas, pres.-Corp. & Bank Shares awarded: chmn., 7,000; pres., 4,900.	1514 1018	72 65	97 68	3509 2792	115	3 3	-2.1	212.3	3 3
FIRST INTERSTATE BANCORP	5932.1 4.8	J. J. Pinola, chmn. & CEO† E. M. Carson, pres.†	951 639	-4 -5	307 54	4254 2516	98	4 4	-3.7	-62.1	5 5
FIRST UNION	2899.0 15.8	E. E. Crutchfield, Jr., chmn., pres. & CEO B. J. Walker, v.-chmn.; chmn. & CEO-sub. Shares of restricted stock granted: chmn., 10,000; vice-chmn., 5,400.	900 600	3 13	147 0	2840 2019	114	2 3	16.3	-3.0	2 3
FIRST WACHOVIA	2020.2 15.7	J. G. Medlin, Jr., chmn., pres. & CEO D. R. Riddle, exec. v-p	865 422	15 9	399 372	2956 1693	122	2 2	15.2	-13.6	3 3
FLEET/NORSTAR FINANCIAL GROUP	3051.1 18.9	J. T. Murray, chmn., pres. & CEO P. D. Kiernan, chmn. & CEO* *Passed away 9/14/88.	1006 990	26 60	2271 0	5820 NA	139	3 NA	16.3	11.3	3 NA
MANUFACTURERS HANOVER	8545.0 24.9	J. F. McGillicuddy, chmn. & CEO† E. A. Farley, vice-chmn.† Restricted stocks units awarded: chmn., 10,000.	1646 1022	105 163	0 0	3358 1881	81	3 3	-7.0	111.9	5 4
MIDLANTIC	1846.5 17.4	R. Van Buren, chmn. & CEO-Cp., MBI† R. T. Peraino, pres.-Cp.; chmn.-CBI & CB† Shares awarded under Incentive Plan: chmn., 10,000; pres., 3,700.	1093 660	16 4	278 1193	4064 2898	97	4 4	15.4	11.4	3 3
J. P. MORGAN	7839.4 17.9	L. T. Preston, chmn. D. Weatherstone, pres. Shares vested under Mandatory Deferred Award Plan: chmn., 6,482; pres., 3,889.	1703 1425	37 51	395 0	5221 5855	122	4 5	12.3	7.4	3 5
NATIONAL CITY	2226.7 17.6	E. B. Brandon, chmn. & CEO A. S. Miles, pres. *Includes compensation paid by First Kentucky Natl. until 7/29/88 (date acquired by Natl. City).	659 468*	50 NA	0 119	1975 NA	167	1 NA	14.7	13.0	2 NA
NCNB	2833.5 13.3	H. L. McColl, Jr., chmn.-Cp., NCNB T. P. Hartman, exec. v-p	1200 735	184 183	69 35	2418 1430	132	2 1	13.2	-15.9	3 3
NORWEST	2474.5 18.0	L. P. Johnson, chmn., pres. & CEO R. M. Kovacevich, vice-chmn. & COO *Incl. 720K paid in connection with hiring.	1243 994	12 20	141 1017e	3302 3382	172	2 3	7.9	109.2	3 3
PNC FINANCIAL	3827.2 17.5	T. H. O'Brien, chmn., pres. & CEO R. C. Milsom, vice-chmn.	1334e 714	68 39	0 133	2819 1943	128	2 2	15.2	11.9	2 2
SECURITY PACIFIC	8483.1 17.5	R. J. Flamson III, chmn. & CEO† G. F. Moody, pres. & COO† Shares of restricted stock granted: chmn., 60,000; pres., 40,000.	1440 1040	43 42	342 497	4402 3730	129	3 4	10.7	25.0	3 4
SHAWMUT NATIONAL	2811.2 14.4	J. B. Alvord, chmn. & CEO G. S. Overstrom, Jr., pres. & COO Shares of restricted stock granted: chmn., 17,500; pres., 14,000.	900 675	31 32	377 228	NA NA	118	NA NA	13.5	-10.4	NA NA
SOVRAN FINANCIAL	2230.3 17.0	C. A. Cutchins III, chmn. C. C. McGehee, chmn.-ex. comm.	798 638	-1 2	685 248	3134 2212	119	3 3	16.9	1.9	2 3
SUNTRUST BANKS	2889.0 16.4	R. Strickland, chmn. & CEO J. R. Wells, Jr., pres.	517 504	0 0	152 149	2477 1930	114	2 2	16.5	5.6	2 2
WELLS FARGO	4859.7 22.4	C. E. Reichardt, chmn. P. Hazen, pres.	1330 945	17 13	1034 0	7093 4855	208	3 3	12.4	65.2	3 4
6 BEVERAGES (CONSUMER PRODUCTS)											
AMMEUSER-BUSCH	8924.1 23.1	A. A. Busch III, chmn. & pres. J. E. Ritter, v-p & group exec.	1541 804	6 16	4126 1888	14973 5706	157	4 4	21.6	20.6	4 4

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG-TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE	CHANGE IN ROE	RATING
COCA-COLA	8337.8 34.1	R. C. Goizueta, chmn. & CEO D. R. Keough, pres. & COO	2164 1598	8 17	675 422	9556 7814	170	4 4	29.7	49.9	3 4
COCA-COLA BOTTLED BEVERAGES	3874.4 9.2	B. G. Dyson, pres. & CEO† L. R. Cowart, exec. v-p & CFO†	1047 535	31 27	0 0	NA NA	NA NA	NA NA	5.6	2.7	NA NA
GENERAL CINEMA	2377.9 16.2	R. A. Smith, chmn. & CEO R. J. Tarr, Jr., co-chmn., pres. & COO	1225 975	69 61	0 1141	2576 4217	137	2 4	NA	-27.4	NA NA
IPSICO	13007.0 24.1	D. W. Calloway, chmn. & CEO M. H. Jordan, pres. & CEO-sub.	1365 840	20 7	0 0	3958 2614	172	2 2	23.5	5.5	2 2
BUILDING MATERIALS (INDUSTRIAL: LOW TECH)											
PG INDUSTRIES	5616.7 20.8	V. A. Sarni, chmn. & CEO E. J. Slack, pres. & COO*†	1133 633	29 5	1195 875	5150 3395	171	3 4	18.4	17.4	3 4
*Retired 10/31/88. Shares earned under Incentive Plan: chmn., 7,249; pres., 1,678.											
TERWIN-WILLIAMS	1950.5 16.8	J. G. Breen, chmn. & CEO T. A. Combes, pres. & COO	746 423	-15 -11	0 0	3766 1427	122	3 2	17.8	4.8	3 2
ULCAN MATERIALS	1053.2 21.8	H. A. Sklenar, pres. & CEO W. J. Grayson, Jr., exec. v-p	708 360	9 4	244 132	2410 1228	194	1 1	20.1	43.9	2 2
CHEMICALS (INDUSTRIAL: LOW TECH)											
R PRODUCTS & CHEMICALS	2486.5 16.5	D. F. Baker, chmn. & CEO L. C. Holt, Jr., vice-chmn. & CAO	997 719	17 15	881 679	3300 4096	138	3 4	10.3	33.4	3 4
AMERICAN ANAMID	4592.0 14.8	G. J. Sella, Jr., chmn., pres. & CEO† W. A. Liffers, vice-chmn.†	1692 911	20 11	0e 461	5068 3443	174	3 4	13.6	102.7	3 4
CO CHEMICAL	2700.0 35.9	H. A. Sorgenti, pres. & CEO W. H. Magee, sr. v-p & CFO	760 584	13 54	0e 0e	NA NA	NA NA	NA NA	NA	NA	NA NA
IBOT	1769.9 11.9	R. A. Charpie, chmn.† S. W. Bodman, chmn. & CEO	1000* 400	100 33	0 0	2088 NA	160	1 NA	10.3	4.4	3 NA
*Incl 500K pd to him upon retirement 9/30/88.											
DW CHEMICAL	16682.0 33.2	F. P. Popoff, pres. & CEO J. G. Temple, Jr., exec. v-p; chmn.-sub.	1040 843	15 20	1710 662	5659 4355	230	3 3	23.0	2644.5	2 3
Shares of restricted stock awarded: pres., 10,154; exec. v-p, 8,636.											
PONT	32917.0 14.2	R. E. Heckert, chmn. E. S. Woolard, Jr., pres.	1611 1213	14 15	56 0	9096 4029	145	4 4	12.8	59.3	4 4
REPORT- MORAN	1944.6 36.0	J. R. Moffett, chmn. & CEO M. H. Ward, pres. & COO	1550 1280	67 70	270 100	3365 2635	162	2 3	24.0	131.9	2 2
ORGIA GULF	1060.6 75.6	J. R. Kuse, chmn., pres. & CEO J. D. Bryan, v-p-operations	841 500	5 5	0 0	2361 1396	NA NA	NA NA	60.8	-10.1	1 1
F. GOODRICH	2416.7 19.3	J. D. Ong, chmn. & CEO L. Carter, pres. & COO	960 728	13 8	495 339	3224 2475	172	2 2	9.8	NA	1 1
R. GRACE	5786.1 13.2	J. P. Grace, chmn., pres. & CEO J. P. Bolduc, vice-chmn.	1395 869	16 58	2400 1221e	6401 NA	126	4 NA	-2.0	149.3	5 NA
Shares of restricted stock issued: chmn., 25,600; vice-chmn., 19,200.											
HEAT LAKES CHEMICAL	557.8 22.6	E. Kampen, chmn., pres. & CEO A. W. Smith, exec. v-p	725 264	36 22	353 0	2075 806	155	2 1	16.4	53.5	2 1
ERCULES	2802.1 5.9	D. S. Hollingsworth, chmn. & CEO F. L. Buckner, pres. & COO	614 420	-7 -7	0 0	1635 1214	127	1 2	18.9	-34.8	2 2
Shares of restricted stock awarded: chmn., 2,450; pres., 1,400.											
MONT	1710.8 27.5	A. F. Giacco, chmn. & CEO† R. M. Hendricks, pres. & COO†	841 481	NA 49	0 0	NA NA	NA NA	NA NA	23.4	NA	NA NA
Shares of restricted stock awarded: chmn., 4,900; pres., 2,600.											
IC FERTILIZER GROUP	1185.2 16.2	B. B. Turner, chmn., pres. & CEO† C. C. Williams, sr. v-p†	577* 332*	NA NA	0 0	NA NA	NA NA	NA NA	NA	NA	NA NA
*Includes salary paid by Intl. Mins. & Chem. 7/87-2/88. Shares restricted stock vested: chmn., 4,800; sr. v-p, 2,400.											
BRIZOL	1125.7 19.8	L. E. Coleman, chmn. & CEO† W. G. Bares, pres. & COO†	758 506	17 18	0 97	2020 1695	140	2 2	15.5	70.3	2 2
ONSANTO	8293.0 15.6	R. J. Mahoney, chmn. & CEO E. H. Harbison, Jr., pres. & COO	1485 1049	61 71	0 247	4186 3087	189	3 3	12.7	NA	2 3
ORTON THIKOL	2461.1 14.1	C. S. Locke, chmn. & CEO S. J. Stewart, pres. & COO	1033 547	11 23	3641 275	7228 1800	107	4 3	15.0	-16.7	4 3
ALCO CHEMICAL	994.2 22.2	W. H. Clark, chmn., pres. & CEO† D. E. Jackson, exec. v-p-intl. ops.	893 520	28 22	105 69	2175 1337	146	2 2	18.6	16.3	2 2
LIH	2308.0 14.3	J. W. Johnstone, Jr., chmn., pres. & CEO R. R. Berry, exec. v-p	759 447	17 4	507 100	2585 1938	150	2 2	12.3	NA	1 1
UANTUM CHEMICAL CORP	2921.9 NA	J. H. Stookey, chmn., pres. & CEO D. L. Allen, exec. v-p	1429 769	47 41	4455 2108	9752 5053	318	3 3	NA	NA	NA NA
OHM & HAAS	2535.0 19.1	V. L. Gregory, Jr., chmn. *†† J. L. Wilson, chmn.†	941 793	1 25	0 218	3482 2326	145	3 3	17.1	26.6	3 3
*Retired 6/30/88. Shares of restricted stock awarded: present chmn., 8,864.											

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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES \$ MILLIONS ROE	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
UNION CARBIDE	8324.0 36.1	R. D. Kennedy, chmn., pres. & CEO† J. C. Stephenson, v.-chnm., CFO & CAO†	1396 853	40 27	2217 754	5699 5064	126	4 5	22.5	NA	1 2
9 CONGLOMERATES (INDUSTRIAL: LOW TECH)											
ALCO STANDARD	3874.1 13.4	R. B. Mundt, chmn. & CEO R. C. Gozon, pres. & COO	1407 616	19 29	123 142	3294 1526	157	3 2	14.2	-19.6	3 3
ALLIED-SIGNAL	11909.0 14.2	E. L. Hennessy, Jr., chmn. & CEO A. Belzer, pres. & COO	1550 1061	12 53	3297e 1575e	8533 4395	81	5 5	15.4	NA	3 3
GENERAL ELECTRIC	49414.0 18.3	J. F. Welch, Jr., chmn. & CEO L. A. Bossidy, vice-chnm. & exec. off.	2352 1594	14 16	0 0	18849 6965	134	5 5	15.9	9.1	5 5
GULF & WESTERN	3123.4 16.6	M. S. Davis, chmn. & CEO D. Oresman, exec. v-p & CAO	3673 1081	60 14	12577e 381	21822 3896	170	5 4	15.1	164.5	5 3
HOUSEHOLD INTERNATIONAL	2637.4 14.7	E. P. Hoffman, pres. & COO D. C. Clark, chmn. & CEO	1472* 1015	NA 4	0 4462	NA 8073	148	NA 5	15.4	66.0	NA 4
*Includes \$597,000 for compensation forfeited upon joining company. Shares awarded as bonus: chmn., 3,500.											
ITT	19355.0 10.8	R. V. Araskog, chmn. & CEO D. C. Thomas, pres. & COO	2234 1327	18 17	617 332	10019 5328	141	5 4	10.7	155.7	4 4
Shares of restricted stock awarded: chmn., 120,000; pres., 10,230.											
MINNESOTA MINING & MFG.	10581.0 20.9	A. F. Jacobson, chmn. & CEO M. J. Monteiro, exec. v-p	1081 575	13 10	675 399	3488 2658	151	3 3	18.8	26.3	3 3
Shares of restricted stock granted: chmn., 4,213; exec v-p, 3,840.											
PALL	455.5 17.4	D. B. Pall, chmn. A. Krasnoff, vice-chnm.	588 588	5 5	0 0	1697 1921	128	1 3	18.0	-12.3	2 3
ROCKWELL INTERNATIONAL	12134.1 20.7	D. R. Beall, chmn. & CEO R. Anderson, chmn.-exec. comm. *†	1240 1120	12 -23	2064 2890	8827 12523	133	4 5	19.7	2.4	4 5
*Retired Oct. 1, 1988.											
TELEDYNE	4522.7 18.3	H. E. Singleton, chmn. G. A. Roberts, CEO & pres.	860 808	1 1	0 0	2560 2408	103	3 4	17.3	-47.1	4 5
TENNECO	13234.0 -0.8	J. L. Ketelsen, chmn. & CEO† J. P. Diesel, pres.††	1077 740	3 0	0 0	3068 2119	146	2 3	-1.3	NM	5 5
Shares of restricted stock granted: chmn., 65,000; pres., 2,000.											
TEXTRON	7279.4 11.5	B. F. Dolan, chmn., pres. & CEO† D. K. Farrar, sr. exec. v-p-operations†	2066 1075	11 5	0 0	6519 2993	109	4 4	12.0	3.2	4 4
TRW	6982.0 16.6	R. F. Mettler, chmn. & CEO† J. T. Gorman, chmn., pres. & CEO	1187 818	12 4	0 274	7587 2921	106	5 4	17.2	28.1	4 3
USX	16877.0 14.0	D. M. Roderick, chmn. W. E. Swales, vice-chnm.-energy	1961 1018	44 32	0 0	6545 2343	124	4 3	-6.3	294.3	5 5
WHITMAN CORP.	3582.5 20.4	K. D. Bays, chmn. & CEO B. F. Schenk, vice-chnm.†	1155 805	78 5	1123e 2230e	NA 5470	200	NA 4	10.8	123.3	NA 4
10 CONTAINERS & PACKAGING (INDUSTRIAL: LOW TECH)											
SONOCO PRODUCTS	1599.8 21.2	C. W. Coker, pres. T. C. Cox III, exec. v-p	841 473	31 31	0 68	2788 1226	233	1 1	17.9	26.8	2 2
TEMPLE-INLAND	2099.0 18.2	C. J. Grum, pres. & CEO W. W. McDonald, exec. v-p & CFO	804 515	21 6	0 0	7076 2325	142	4 3	14.0	84.5	3 3
11 DRUGS (CONSUMER PRODUCTS)											
ABBOTT LABORATORIES	4937.0 30.5	R. A. Schoellhorn, chmn. & CEO D. L. Burnham, vice-chnm. & CFO	1920* 790	44 15	2322 0	8265 2336	149	4 3	30.4	22.7	3 2
*Includes \$469,000 tax reimbursement. Shares of restricted stock awarded: chmn., 21,600.											
AMERICAN HOME PRODUCTS	5500.5 31.3	J. R. Stafford, chmn., pres. & CEO J. W. Culligan, chmn.-exec. comm. *†	1430 1118	9 -8	535 2975	4734 6930	148	3 5	32.5	0.1	2 4
*Retired 11/88.											
BAXTER INTERNATIONAL	6861.0 10.5	V. R. Loucks, Jr., chmn. & CEO W. H. Gantz, pres.	997 633	-17 -15	466e 259e	4040 2415	120	3 3	8.2	68.1	3 4
BECTON, DICKINSON	1749.1 15.3	W. J. Howe, chmn. & CEO R. V. Gilmartin, pres.	1397 456	8 11	3531 1492	7505 2792	175	3 3	15.2	18.5	4 3
BRISTOL-MYERS	5972.5 23.4	R. L. Gelb, chmn. W. R. Miller, vice-chnm.	1475 917	15 9	12578 3354	18018 6524	150	5 4	22.0	7.8	4 4
JOHNSON & JOHNSON	9000.0 27.8	J. E. Burke, chmn. & CEO† D. R. Clare, pres.; chmn.-exec. comm.†	1477 1130	15 15	1381 683	5867 5173	171	3 4	21.1	51.8	3 3
Shares issued under Stock Compensation Plan: chmn., 3,600; pres., 2,700.											
ELI LILLY	4069.7 23.6	R. D. Wood, chmn., pres. & CEO E. L. Step, exec. v-p; pres.-phar. div.	1148 652	14 14	330 1287	8598 3520	164	3 3	19.2	8.8	3 3
MARION LABORATORIES	826.6 39.2	F. W. Lyons, Jr., pres. & CEO E. M. Kauffman, chmn.	817 777	-7 -9	0 0	3011 2373	181	1 2	32.5	66.1	1 1
MERCK	5939.5 42.3	P. R. Vagelos, chmn., pres. & CEO J. E. Lyons, vice-chnm.	1608 908	17 4	5286 5414	9229 7872	266	3 4	37.1	106.2	2 3
Shares awarded: chmn., 3,361.											

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	EXECUTIVE		1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
	1988 SALES: \$ MILLIONS ROE: %		TOTAL ANNUAL COMP.		LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE	CHANGE IN ROE	RATING
3M	5385.4 18.4	E. T. Pratt, Jr., chmn. & CEO G. D. Laubach, pres.	1371 1028	10 10	2376 0	10984 6961	125	4 5	18.5	-7.1	4 5
CHERING-PLOUGH	2969.4 23.2	R. P. Luciano, chmn. & CEO† R. J. Kogan, pres. & COO†	1342 878	10 10	1979e 1175e	7475 4463	207	3 3	21.1	78.5	3 3
WITKLINE ECKMAN	4749.0 14.8	H. Wendt, chmn. & CEO G. S. Herbert, exec. v-p	751 700	-51 29	0 0	4196 NA	140	3 NA	30.3	-34.7	2 NA
QUIBB	2585.8 32.1	R. M. Furlaud, chmn. & CEO J. Leschly, pres. & COO	1542 833	10 17	630 708	17266 6081	175	5 4	25.0	107.8	4 3
INTEX	1336.1 48.5	A. Bowers, chmn. H. A. Wolf, vice-chmn.	1096 565	11 6	449 2796	10762 4753	186	4 3	39.3	126.8	2 2
JOHN	2753.5 20.0	T. Cooper, chmn. & CEO L. C. Hoff, pres. & COO Shares awarded: chmn., 9,000; pres., 9,000.	1006 831	25 8	634 944	3917 4141	137	2 4	18.5	27.5	2 3
ARNER- AMBERT	3908.4 34.1	J. D. Williams, chmn. & CEO M. R. Goodes, pres. & COO	1310 886	13 11	4814 2711	8786 5212	177	3 3	34.0	NA	1 1
2 ELECTRICAL, ELECTRONICS (INDUSTRIAL: HIGH TECH)											
MP	2669.7 21.0	W. F. Raab, chmn. & CEO H. A. McInnes, vice-chmn.	612 429	13 10	152 232	2886 2334	131	2 3	18.0	93.6	1 2
DOOPER INDUSTRIES	4258.3 12.7	R. Cizik, chmn. & pres. A. E. Riedel, sr. v-p-admin.	1235 647	40 37	1450e 725e	5116 2584	141	3 3	11.3	39.8	3 3
MERSON ELECTRIC	6793.1 18.7	C. F. Knight, chmn. & CEO J. F. Hardymon, pres. & COO	1681 650	12 25	654 286	7508 2468	123	4 3	17.8	3.8	4 3
ARRIS	2104.8 7.0	J. T. Hartley, chmn., pres. & CEO F. J. Lewis, sr. v-p; asst.-chmn./CEO	983 437	20 -1	0 0	2482 1287	109	2 2	7.4	-24.6	4 3
ITEL	2874.8 21.8	A. S. Grove, pres. & CEO G. E. Moore, chmn.	684 645	2 -2	5746 0	7466 1675	122	4 2	6.9	NM	3 1
TON INDUSTRIES	4942.8 14.6	O. L. Hoch, chmn. & CEO F. W. O'Green, chmn.-exec. comm. *Reflects payment until he retired as chmn. and assumed present title (3/31/88).	997 973*	27 -5	3581 4235	6281 10062	86	5 5	11.5	-54.1	5 5
OTOROLA	8250.0 13.2	W. J. Weisz, vice-chmn. & off. of Brd. J. F. Mitchell, vice-chmn. & off. of Brd.	824 752	10 11	677 0	4391 6580	113	4 5	10.2	318.3	2 4
ATIONAL SERVICE INDUSTRIES	1444.1 15.4	E. Zaban, chmn. S. Kirschner, pres. & CEO	605 573	4 23	0 0	1711 1435	122	1 2	15.2	-4.7	2 2
AYCHEM	1102.7 13.8	P. M. Cook, chmn. & CEO R. M. Halperin, pres. & COO Shares of restricted stock awarded: chmn., 141,120; pres., 127,008.	1000 808	55 47	0 0	1969 1667	109	1 2	12.5	72.2	2 2
QUARED	1656.8 18.7	D. L. Knauss, chmn. & CEO† J. L. Stead, pres., CEO & COO	770 528	-6 -7	203e 0	2537 NA	126	2 NA	16.5	10.6	2 NA
EXAS ISTRUMENTS	6294.8 19.5	J. R. Junkins, chmn., pres. & CEO W. P. Weber, exec. v-p	798 451	17 8	789 93	3011 1374	123	2 2	11.6	NA	1 1
ESTINGHOUSE LECTRIC	12499.5 21.7	J. C. Marous, chmn. & CEO P. E. Lego, pres. & COO	1408 1104	44 52	253 253	5726 NA	129	4 NA	21.5	15.9	3 NA
3 FOOD PROCESSING (CONSUMER PRODUCTS)											
RCHER-DANIELS- IDLAND	7379.4 12.9	D. O. Andreas, chmn. & CEO J. R. Randall, pres.	1104 725	13 13	0 0	2965 2014	141	2 2	11.9	42.0	2 3
ORDEN	7243.5 16.9	R. J. Ventres, chmn. & CEO† A. S. D'Amato, exec. v-p & pres.†	1412 595	41 38	575 1122	4169 2688	183	2 2	16.2	22.6	3 3
AMPBELL SOUP	5269.1 12.8	R. G. McGovern, pres. & CEO H. M. Baum, sr. v-p & pres.-USA Div.	826 480	19 29	122 198	4484 1394	138	3 2	13.8	-10.8	3 2
OHAGRA	10341.4 19.2	C. M. Harper, chmn. & CEO P. B. Fletcher, pres. & COO-sub.	1312 429	12 2	1392 464	7863 2838	145	4 3	19.5	-5.1	4 3
PC INTERNATIONAL	4700.0 24.2	J. R. Eisner, chmn. & CEO R. W. Siebrasse, vice-chmn.; pres.-sub.	1181 508	36 42	1224 335	4810 2123	219	2 2	26.6	133.8	2 1
ENERAL MILLS	5314.7 33.6	H. B. Atwater, Jr., chmn. & CEO F. C. Blodgett, vice-chmn., CFO & CAO	1310 1014	1 0	1835e 1002	5693 3966	184	3 3	35.0	25.1	2 2
J. HEINZ CO	5639.5 26.7	A. J. F. O'Reilly, chmn., pres. & CEO J. J. Bogdanovich, sr. v-p; chmn.-sub.	1099 564	7 -4	3822 773	9746 3748	155	4 3	25.1	20.1	3 3
ERSHEY FOODS	2168.0 14.4	R. A. Zimmerman, chmn. & CEO K. L. Wolfe, pres. & COO	732 502	11 10	360 245	3040 2073	162	2 2	16.8	-13.3	3 3
OLLY FARMS	1798.4 15.6	R. L. Taylor II, pres. & CEO; v-p-sub. K. N. May, chmn. & CEO-sub.	262 206	-13 9	0 0	816 572	208	1 1	14.8	13.1	1 1
ELLOGG	4348.8 32.4	W. E. LaMothe, chmn. & CEO H. W. Schroeder, pres. & COO	1300 590	18 18	800e 1	4159 1975	196	2 2	33.5	-21.3	2 2
IONEER HI-BRED NTERNATIONAL	862.9 11.0	T. N. Urban, chmn. & pres.† C. S. Johnson, sr. v-p & treas.† Shares of restricted stock granted: chmn., 2,541; sr. v-p, 1,530.	384 265	28 30	0 0	1077 708	97	1 1	11.8	-50.6	3 4



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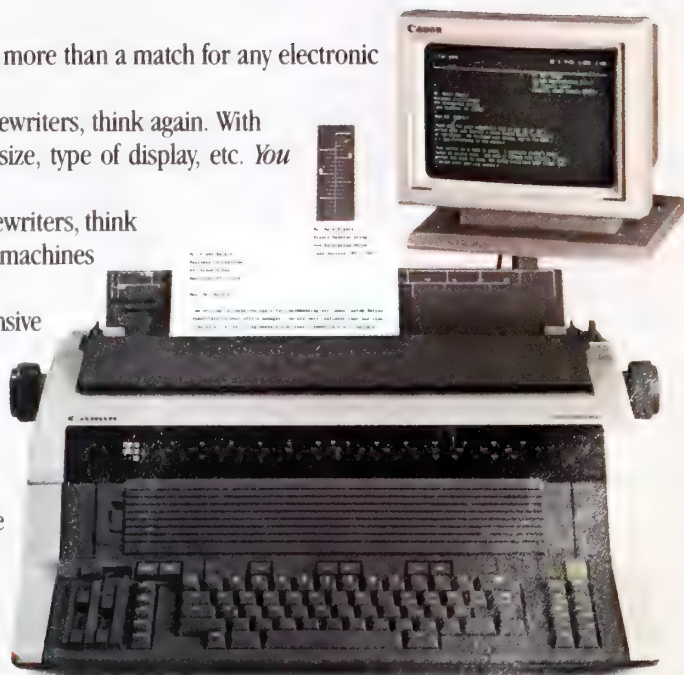
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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG-TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
QUAKER OATS	5615.6 20.1	W. D. Smithburg, chmn. & CEO F. J. Morgan, pres. & COO	1186 833	19 16	2179e 3849e	6072 6874	195	3 4	19.3	3.2	3 4
RALSTON PURINA	6045.6 29.6	W. P. Stiritz, chmn., CEO & pres. J. W. Brown, v-p; chmn. & CEO-sub.	1029 369	18 4	11919 0	16427 1426	182	4 1	36.9	6.8	4 1
SARA LEE	11206.4 20.0	J. H. Bryan, Jr., chmn. J. B. McKinnon, pres.	1367 850	9 13	5396 1862	13731 4528	178	4 3	19.2	-0.8	4 4
SYSCO	5561.0 16.3	J. F. Woodhouse, chmn. & CEO B. M. Lindig, pres. & COO	915 797	180 189	123 0	1854 1683	176	1 2	14.9	10.0	2 2
WM. WRIGLEY JR	891.4 28.3	W. Wrigley, pres. & CEO R. D. Ewers, exec. v-p Shares of restricted stock awarded: pres., 1,432; exec. v-p, 474.	610 403	10 34	0 0	1671 1019	250	1 1	23.6	68.2	1 1
14 FOOD & LODGING (SERVICE)											
HILTON HOTELS	915.4 16.1	B. Hilton, chmn., pres. & CEO J. V. Giovenco, exec. v-p-Nev. Gam.	955 560	18 16	0 0	2437 2621	173	2 2	16.0	4.6	3 3
MARRIOTT	7370.0 32.1	J. W. Marriott, Jr., chmn., pres. & CEO F. W. Cash, exec. v-p Shares vested: chmn., 6,890; exec. v-p, 2,834.	1007 716	3 21	0 309	2877 3819	147	2 3	26.3	62.8	1 2
MCDONALD'S	5520.8 19.7	F. L. Turner, chmn.-exec. comm M. R. Quinlan, pres. & CEO *Includes \$500,000 deferred special bonus.	1075* 900	95 13	1595 915	3770 5294	138	3 4	19.3	0.5	3 NA 4
15 GENERAL & SPECIAL MACHINERY (INDUSTRIAL: LOW TECH)											
BLACK & DECKER	2374.2 13.7	N. D. Archibald, chmn., pres. & CEO G. M. Sherman, sr. v-p	1162 597	63 25	0 0	2474 1408	114	3 2	8.9	NA	1 1
CATERPILLAR	10435.0 15.0	G. A. Schaefer, chmn. P. P. Donis, pres.	662 522	34 33	33 611	2221 2146	156	2 2	8.8	132.1	3 3
DEERE	5460.9 11.9	R. A. Hanson, chmn. & CEO H. W. Becherer, pres.	906 558	88 105	1079 485	2920 NA	173	2 NA	-1.6	779.9	4 NA
DOVER	1953.8 19.7	G. L. Roubos, pres. J. B. Apple, v-p; pres.-sub.	924 659	18 63	323 0	3386 1472	151	3 2	16.5	23.0	3 2
DRESSER INDUSTRIES	3988.6 8.9	J. J. Murphy, chmn. & pres. B. D. St. John, exec. v-p-admin.	978 467	97 97	0 83	2028 1133	171	1 1	3.3	NA	2 1
FMC	3286.9 NA	R. H. Malott, chmn. & CEO R. C. Tower, pres. & COO	1043 739	11 11	0 0	3406 2421	278	1 1	NA	NA	NA NA
INGERSOLL-RAND	3021.4 12.5	T. A. Holmes, chmn. & pres. *† T. H. Black, chmn. & pres. * *Holmes retired 9/30/88 and Black rejoined company 2/1/88.	1053 780	1 NA	729 168	4494 NA	175	3 NA	10.1	70.6	3 NA
SNAP-ON TOOLS	854.6 22.5	M. F. Gregory, pres. & CEO M. G. Hassett, exec. v-p	562 329	27 17	19 232	1452 1099	178	1 1	19.7	27.0	1 2
TYCO LABORATORIES	1792.5 18.4	J. F. Fort, chmn., pres. & CEO L. D. Kozlowski, pres.-Grinnell Corp.	901 813	53 NA	2278 456	7997 NA	309	3 NA	19.9	9.7	4 NA
16 INSTRUMENTS (INDUSTRIAL: HIGH TECH)											
GENERAL SIGNAL	1760.2 5.5	E. M. Carpenter, chmn. & CEO J. E. Halter, sr. v-p-operations *Includes \$200,000 payment for commencement of employment.	860* 308	NA 8	0 0	NA 888	114	NA 1	7.1	0.3	NA 3
HONEYWELL	7148.3 -25.1	J. J. Renier, chmn. & CEO E. W. Spencer, chmn. †	575 558	-33 -45	28 28	2166 2730	89	2 4	-4.4	NM	5 5
JOHNSON CONTROLS	3227.2 11.9	F. L. Brengel, chmn. ‡ J. H. Keyes, pres. & COO ‡	1287 715	49 50	63 63	4167 1780	163	2 2	11.2	16.2	3 3
17 LEISURE TIME INDUSTRIES (CONSUMER PRODUCTS)											
BRUNSWICK	3282.0 20.3	J. F. Reichert, chmn., pres. & CEO V. H. Sommerville, v-p; chmn.-sub. * *Resigned 12/88.	1356 726	17 -26	944 0	10651 NA	164	4 NA	18.7	6.0	4 NA
WALT DISNEY	3747.2 22.8	M. D. Eisner, chmn. & CEO F. G. Wells, pres. & COO	7506 3778	12 11	32588 28357	50201 37238	236	5 5	20.5	55.5	5 5
EASTMAN KODAK	17034.0 20.6	C. H. Chandler, CEO K. R. Whitmore, pres. & exec. off.	1252 969	20 24	0 0	3353 2472	149	2 3	15.4	307.3	1 2
MCA	3023.7 9.7	I. Azoff, v-p ‡ T. P. Pollock, v-p ‡ *Includes extra semi-monthly salary payment due to change in payment dates.	650* 637*	16 14	4337 1775	9847 NA	96	5 NA	9.5	-8.9	5 NA
18 METALS & MINING (RESOURCES)											
ALUMINUM CO OF AMERICA	9795.3 19.8	P. H. O'Neill, chmn. & CEO C. F. Fetterolf, pres. & COO	1113 893	97 28	0 0	NA 3351	155	NA 3	10.9	NA	NA 2
AMAX	3944.0 53.5	A. Born, chmn., pres. & CEO P. E. Drack, pres.-Alumax Inc.	1279 608	33 NA	0 210	2904 NA	168	2 NA	18.6	NA	1 NA

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	EXECUTIVE		1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
	1988 SALES: \$ MILLIONS ROE: %		TOTAL ANNUAL COMP.		LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
OMESTAKE MINING	345.6 8.4	H. M. Conger, chmn. D. K. Fagin, pres.	606 487	12 1	337 0	2523 1201	113	<u>3</u> <u>2</u>	11.1	103.5	<u>2</u> <u>2</u>
EWMONT MINING	499.9 NA	G. R. Parker, chmn., pres. & CEO R. B. Leather, vice-chmn.	823* 513*	-16 -26	0 0	2953 1638	288	<u>1</u> <u>1</u>	NA	NA	NA NA
*Also received \$150,000 and \$147,000 (respectively) for corp. relocation expenses.											
HELPS DODGE	2319.8 28.2	G. R. Durham, chmn. & pres. D. C. Yearley, exec. v-p	850 580	6 5	0 0	2100 1440	235	<u>1</u> <u>1</u>	14.8	NM	<u>1</u> <u>1</u>
EYNOLDS METALS	5567.1 23.6	W. O. Bourke, chmn. & CEO R. G. Holder, pres. & COO	1038 770	11 12	347 360	3910 2704	295	<u>1</u> <u>1</u>	14.5	NA	<u>1</u> <u>1</u>
9 MISCELLANEOUS MANUFACTURING (INDUSTRIAL: LOW TECH)											
DRNING GLASS WORKS	2121.5 18.7	J. R. Houghton, chmn. R. Dulude, group pres.	878 517	9 14	274 62	2862 1738	120	<u>3</u> <u>3</u>	14.3	106.4	<u>2</u> <u>2</u>
Estimated shares awarded under Incentive Stock Plans: chmn., 8,895; gp. pres., 5,811.											
MHART	2762.5 14.0	P. L. Scott, chmn., pres. & CEO W. C. Lichtenfels, pres. & COO†	1120 665*	12 4	0 0	6589 1915	155	<u>4</u> <u>2</u>	8.4	6.1	<u>4</u> <u>4</u>
*Excludes \$780,000 for early retirement. Performance shares earned: chmn., 5,625; pres., 3,744.											
LINOIS TOOL WORKS	1929.8 18.8	J. D. Nichols, chmn. & CEO H. B. Smith, Jr., chmn.-exec. comm.	715 373	18 7	0 1770	2776 3326	205	<u>2</u> <u>3</u>	17.7	140.4	<u>2</u> <u>3</u>
Shares of restricted stock awarded: chmn., 16,000.											
UBBERMAID	1193.5 19.4	S. C. Gault, chmn. & CEO W. W. Williams, pres. & COO	885 652	4 NA	0 0	2994 NA	151	<u>2</u> NA	19.4	2.2	<u>3</u> NA
0 NATURAL RESOURCES (FUEL) (RESOURCES)											
MERADA HESS	4206.0 5.6	R. F. Wright, pres. & COO B. T. Deverin, exec. v-p	775 700	29 25	0 0	1775 1635	119	<u>2</u> <u>3</u>	1.8	NA	<u>2</u> <u>2</u>
Shares distributed: pres., 4,000; exec. v-p, 4,000.											
MOCO	21150.0 15.5	R. M. Morrow, chmn. J. W. Cozad, vice-chmn.	1278 1000	28 40	556 988	6389 3632	138	<u>4</u> <u>4</u>	11.1	-8.3	<u>4</u> <u>3</u>
NADARKO	333.1 8.9	R. J. Allison, Jr., chmn. & CEO J. T. Rodgers, pres. & COO	792 536	5 3	0 0	2117 1483	NA NA	NA NA	4.5	-21.2	<u>4</u> <u>4</u>
SHLAND OIL	7951.9 20.0	J. R. Hall, chmn. & CEO C. J. Luellen, pres. & COO	998 700	15 18	2525 1075	5866 3565	194	<u>3</u> <u>3</u>	17.5	60.0	<u>3</u> <u>3</u>
TLANTIC RICHFIELD	17626.0 25.3	L. M. Cook, chmn. & CEO† R. E. Wycoff, pres. & COO†	1619 1055	12 -1	0 0	4459 3193	145	<u>4</u> <u>4</u>	19.2	328.1	<u>2</u> <u>2</u>
HEVRON	25196.0 12.0	G. M. Keller, chmn.† K. T. Derr, chmn.	1516 808	16 8	661 178	5578 2594	139	<u>4</u> <u>3</u>	7.7	20.2	<u>4</u> <u>3</u>
DASTAL	8236.5 12.3	O. S. Wyatt, Jr., chmn. & CEO J. R. Paul, pres. & COO; chmn.-ANR	994 703	15 19	0 1032	2749 3836	135	<u>2</u> <u>4</u>	9.5	-13.8	<u>3</u> <u>4</u>
KXON	79557.0 16.6	L. G. Rawl, chmn. J. F. Bennett, sr. v-p	1354 871	12 6	0 1378	9103 5832	181	<u>5</u> <u>5</u>	15.9	-1.1	<u>3</u> <u>4</u>
ERR-McGEE	2689.0 7.2	F. A. McPherson, chmn. & CEO J. W. McKenny, pres. & COO	576 486	23 23	0 0	1547 1357	121	<u>1</u> <u>2</u>	-2.8	-9.8	<u>5</u> <u>5</u>
IOBIL	48198.0 12.9	A. E. Murray, chmn., pres. & CEO R. F. Tucker, vice-chmn; pres & COO-	1609 1194	25 23	2112e 727e	8106 4884	173	<u>4</u> <u>4</u>	9.9	75.4	<u>3</u> <u>3</u>
ENNZOIL	2273.9 -15.7	J. H. Liedtke, chmn.† B. P. Kerr, chmn.-exec. comm.†	10872* 10706*	1178 1465	665 839	14678 13474	123	<u>5</u> <u>5</u>	0.4	NM	<u>5</u> <u>5</u>
*Includes special payment of \$10 mil. for exceptional service: Shares distributed: chmn., 4,550.											
HILLIPS ETROLEUM	11304.0 30.2	C. J. Silas, chmn. & CEO G. A. Cox, pres. & COO	761 554	4 5	0 0	2313 1675	177	<u>1</u> <u>2</u>	14.4	-14.6	<u>3</u> <u>3</u>
UN CO	8612.0 0.2	R. McClements, Jr., chmn., pres. & CEO R. P. Hauptfuhrer, pres. & COO*	1024 510	20 -10	109 0	3326 1876	79	<u>4</u> <u>4</u>	4.7	-98.2	<u>4</u> <u>4</u>
*Resigned 11/1/88.											
UN EXPLORATION PRODUCTION	1286.0 -18.9	J. E. McCormick, pres. & COO J. E. Roberts, v-p-production	366 260	NA NA	0 0	NA NA	NA NA	NA NA	NA	NA	NA NA
EXACO	33544.0 17.1	J. W. Kinnear, pres. & CEO A. C. DeCrane, Jr., chmn.	1322 1094	83 52	364 330	3571 3516	190	<u>2</u> <u>3</u>	-8.5	91.9	<u>4</u> <u>4</u>
NOCAL	8853.0 1.1	F. L. Hartley, chmn.*† R. J. Stegemeier, pres. & CEO	1060 878	10 49	1399 272	4355 2277	152	<u>3</u> <u>3</u>	7.3	-94.4	<u>5</u> <u>5</u>
*Retired 6/30/88.											
1 NONBANK FINANCIAL (FINANCIAL SERVICES)											
ETNA LIFE CASUALTY	24296.4 10.0	J. T. Lynn, chmn. R. E. Compton, pres.	1137 608	9 NA	0 11	5700 NA	104	<u>5</u> NA	12.2	11.9	<u>4</u> NA
AMERICAN EXPRESS	22934.0 20.4	J. D. Robinson III, chmn. & CEO L. V. Gerstner, Jr., pres.*	2764 2393	40 40	8169e 3564e	16648 10986	109	<u>5</u> <u>5</u>	17.6	30.6	<u>5</u> <u>5</u>
*Resigned 3/89.											
AMERICAN GENERAL	3823.0 9.6	H. S. Hook, chmn. & CEO M. J. Poulos, pres.	1089 771	3 2	126 89	4661 3255	96	<u>4</u> <u>4</u>	11.2	-36.0	<u>5</u> <u>5</u>
Shares distributed: chmn., 3,625; pres., 2,568.											

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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG-TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
AMERICAN INTL. GROUP	13086.6 17.6	M. R. Greenberg, pres. & CEO G. A. Abouzeid, exec. v-p; chmn.-sub.* *Resigned as director & exec. v-p 1/27/89.	975 400	11 6	0 29	9107 1758	129	5 2	15.7	77.4	4 2
AON	2732.4 16.3	P. G. Ryan, pres. & CEO R. K. Holmberg, exec. v-p & CAO	472 315	-28 -12	0 431	1692 1453	123	1 1	16.2	-1.2	2 2
BERKSHIRE HATHAWAY	1991.9 9.5	M. A. Goldberg, v-p J. V. McKenzie, v-p, CFO & secy.	2997 224	-2 -13	0 0	8325 678	193	4 1	7.5	93.6	4 1
CAPITAL HOLDING	2045.9 15.8	I. W. Bailey II, chmn., pres. & CEO J. A. Franco, v.-chmn. & pres.-sub. Shares of restricted stock awarded: chmn., 20,000; v.-chmn., 20,000.	705 596	11 1	38 0	2200 2209	120	2 3	14.1	23.3	2 3
CHUBB	3980.5 16.5	D. R. O'Hare, chmn. R. D. Smith, pres. Shares earned under Performance Share Plan: chmn., 1,602; pres., 957.	758 503	8 9	0 0e	2178 1407	116	2 2	15.9	NM	1 1
CIGNA	17889.4 7.3	R. D. Kilpatrick, chmn.† W. H. Taylor, pres. & CEO†	1587 1081	26 45	0 0	4064 2425	86	4 4	9.8	NA	1 1
CNA FINANCIAL	8204.0 12.0	E. J. Noha, chmn., pres. & CEO-CNA Ins. D. H. Chookaszian, v-p & controller	1374 404	8 13	0 0	3451 1111	94	3 2	12.0	37.5	3 2
FANNIEMAE	10635.2 22.4	D. O. Maxwell, chmn. & CEO R. E. Birk, pres. & COO	1000 730	36 1106	246 0	3526 NA	201	1 NA	18.2	713.1	1 NA
FIREMAN'S FUND	3691.0 16.6	R. W. Bruce III, pres. & CIO W. M. McCormick, chmn. & CEO-FFIC	1282 1125	10 114	0 0	3797 4822	99	3 5	10.1	NA	2 3
GENERAL RE	2735.8 19.2	R. E. Ferguson, chmn., pres. & CEO† J. C. Eling, vice-chmn.† Shares distributed under Performance Share Plan: chmn., 1,921; vice-chmn., 1,258.	979 767	17 9	0 0	2391 1970	117	2 2	16.6	117.8	1 2
GREAT WESTERN FINANCIAL	3165.5 12.5	J. F. Montgomery, chmn. & CEO J. F. Maher, pres. & COO	1294 828	15 22	743 138	5267 2411	122	4 3	14.2	-25.7	4 4
LOEWS	10396.9 23.4	P. R. Tisch, pres. & co-CEO J. R. Ave, pres.-Lorillard *Reflects compensation beginning 3/88.	796* 495	NA 14	0 0	NA 1322	150	NA 1	20.8	13.9	NA 1
MARSH & MCLENNAN	2272.4 39.8	L. J. Lasser, pres.-Putnam Cos. F. J. Tasco, chmn. Shares of restricted stock granted: pres., 4,400; chmn., 6,000.	1725 1265	NA 12	327 102	NA 5495	152	NA 4	38.7	26.0	NA 2
MERRILL LYNCH	10547.2 12.8	W. A. Schreyer, chmn. & CEO D. P. Tully, pres. & COO Shares awarded under Equity Cap Accumulation Plan: chmn., 7,500; pres., 7,500.	2500 2125	31 29	275e 259e	8734 7434	78	5 5	13.6	33.3	4 5
MORGAN STANLEY GROUP	4108.8 31.7	S. P. Gilbert, chmn. R. F. Greenhill, vice-chmn. Shares of restricted stock granted: chmn., 25,750; v.-chmn., 25,752.	4425 4425	48 48	0 0	10275 10125	NA NA	NA NA	26.6	-8.8	4 4
SAFECO	2872.9 15.0	B. Maines, pres. & CEO J. W. Cannon, exec. v-p; pres.-sub.	484 290	9 6	102 0	1723 1237	115	1 1	13.8	39.8	1 2
SALOMON	6146.0 7.5	J. H. Gutfreund, chmn., pres. & CEO E. Weil, exec. v-p	4000 4000	219 139	1085 1029	9452 NA	60	5 NA	9.0	-60.3	5 NA
ST. PAUL COS.	3630.8 17.3	R. J. Haugh, chmn., pres. & CEO D. W. Leatherdale, pres. Shares of restricted stock awarded: pres., 5,000.	919 584	8 8	85 64	2770 1824	122	2 2	15.7	317.1	1 2
SALLIEMAE	2172.0 36.8	E. A. Fox, pres. & CEO L. A. Hough, exec. v-p	779 422	17 17	0 0	1796 1091	232	1 1	35.3	47.3	1 1
TORCHMARK	1669.8 21.3	R. K. Richey, chmn. & CEO C. B. Hudson, pres. & CEO-sub.	799 497	-13 31	102 0	2878 1347	152	2 1	21.3	33.0	2 1
TRANSAMERICA	7879.0 12.8	J. R. Harvey, chmn. & CEO F. C. Herringer, pres.	1300 800	0 0	0 0	3457 2193	116	3 3	12.9	130.8	2 2
TRAVELERS	18986.3 9.2	E. H. Budd, chmn., pres. & CEO T. O. Thorsen, exec. v-p & CFO	840 527	-4 5	393 0	3358 1465	87	3 2	9.2	-0.6	3 3
USF&G	5581.8 15.6	J. Moseley, chmn. & pres.; chmn.-sub. P. J. Scheel, exec. v-p; pres.-sub.	910 599	4 16	0 58	3030 1896	92	3 3	18.7	NA	1 1

22 OFFICE EQUIPMENT & COMPUTERS (INDUSTRIAL: HIGH TECH)

AMDAHL	1801.8 21.2	J. C. Lewis, chmn. & CEO† E. R. White, vice-chmn.†	930 641	4 -6	1768 775	7996 10882	281	3 4	15.9	296.8	3 4
APPLE COMPUTER	4434.1 36.7	J. Sculley, chmn., pres. & CEO D. W. Yocum, sr. v-p; pres.-sub.	2479 923	16 11	7013 2848	13329 6206	371	3 3	28.3	229.8	3 2
AUTOMATIC DATA PROCESSING	1616.8 19.4	J. S. Weston, chmn. & CEO W. J. Turner, pres. & COO	571 399	12 12	1980e 385e	3593 1443	136	3 1	16.8	23.4	2 2
COMPAQ COMPUTER	2065.6 31.3	J. R. Canion, pres. & CEO E. Pfeiffer, sr. v-p-intl. ops.	1867 893	36 8	0 0	3792 2021	450	1 1	29.6	61.0	1 1
COMPUTER ASSOCIATES	925.3 23.6	C. B. Wang, chmn. & CEO A. W. Wang, pres. & COO	1431 1188	46 53	0 0	3078 2459	364	1 1	20.2	124.0	1 2
CRAY RESEARCH	756.3 23.1	J. A. Rollwagen, chmn. & CEO M. A. Gumucio, pres. & COO	541 358	-4 1	351 144	4711 3479	93	4 4	25.2	-6.7	2 3



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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000		% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT	
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
DELUXE CORP	1196.0	H. V. Haverly, pres. & CEO	510	12	174	1591	116	1	28.7	-10.1	1
	26.5	J. K. Twogood, exec. v-p	303	34	69	805		1			1
DIGITAL EQUIPMENT	12284.7	K. H. Olsen, pres.	932	3	9052	11644	148	5	15.0	63.5	4
	16.0	J. J. Shields, sr. v-p	526	3	4074	5809		4			4
HEWLETT-PACKARD	10296.0	J. A. Young, pres., CEO & vice-chmn.	1104	6	4519	8650	147	4	14.2	46.0	4
	17.9	D. O. Morton, exec. v-p & COO	686	5	2810	5273		4			3
IBM	59681.0	J. F. Akers, chmn.	1526	21	564	4852	87	4	13.9	-32.2	4
	13.9	K. V. Cassani, vice-chmn. Shares of restricted stock awarded: chmn., 3,773; vice-chmn., 1,787.	980	16	2089e	NA		NA			NA
MICROSOFT	718.6	J. A. Shirley, pres. & COO	288	11	3219	4298	NA	NA	30.3	-26.5	2
	32.5	W. H. Gates III, chmn. & CEO	175	0	0	510		NA			1
NCR	5989.9	C. E. Exley, Jr., chmn. & CEO†	1069	7	1721	12985	140	5	17.7	44.2	4
	19.6	G. P. Williamson, pres.‡	502	39	612	NA		NA			NA
ORACLE SYSTEMS	394.9	L. J. Ellison, pres. & CEO	1363	91	0	2283	NA	NA	28.3	65.5	1
	34.1	G. D. Kennedy, sr. v-p-U.S. Sales & Svc.	547	31	0	2860		NA			2
PITNEY-BOWES	2649.9	G. B. Harvey, chmn., pres. & CEO	859	8	327	4467	186	2	18.8	2.9	3
	18.7	J. L. Bast, pres.-PB Business Systems	462	19	443	2007		2			2
TANDEM COMPUTERS	1424.7	J. G. Treybig, pres. & CEO	481	-6	0	1686	152	1	12.6	38.9	2
	11.4	R. C. Marshall, sr. v-p & COO	340	-12	220	1887		2			3
TANDY	3992.3	J. V. Roach, chmn., CEO & pres.	872	5	0	2310	104	2	16.7	-2.0	2
	17.4	B. S. Appel, pres.-Radio Shack Div.	621	5	0	1673		3			2
UNISYS	9902.0	W. M. Blumenthal, chmn. & CEO	1275	0	388	13660	146	5	9.4	63.3	5
	16.3	E. Botwinick, sr. v-p Shares of restricted stock awarded: chmn., 16,000.	699	NA	0	NA		NA			NA
WANG LABORATORIES	3074.5	A. Wang, chmn. & CEO	511	30	181	1490	47	3	0.6	155.1	5
	3.2	F. A. Wang, pres. & COO	433	71	184	1116		3			4
XEROX	16441.0	M. Howard, vice-chmn.	1244	46	343	4310	113	4	8.8	-12.5	4
	6.6	D. T. Kearns, chmn. & CEO	901	-21	910	5293		5			5

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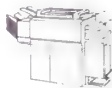
COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
3 OIL SERVICE & SUPPLY (RESOURCES)											
AKER HUGHES	2336.2 5.3	J. D. Woods, pres. & CEO E. H. Clark, Jr., chmn.	1014 830	64 16	0 0	NA NA	87	NA NA	-25.3	-39.3	NA NA
ALLIBURTON	4825.7 4.0	T. H. Cruikshank, pres. & CEO T. L. Austin, Jr., pres. & CEO-sub.	838 525	7 5	299e 67e	2697 1786	113	3 3	-5.9	299.3	4 4
CHLUMBERGER	4924.5 16.5	D. E. Baird, chmn., pres. & CEO R. Genin, vice-chmn.	1025 750	105 36	0 0	2018 1850	99	3 3	-3.5	222.7	3 3
4 PAPER & FOREST PRODUCTS (RESOURCES)											
COISE CASCADE	4094.6 17.1	J. B. Fery, chmn. & CEO J. H. Miller, pres. & COO	1052 816	34 34	0 0	2430 1954	159	2 2	11.9	145.1	2 2
GEORGIA-PACIFIC	9509.0 17.7	T. M. Hahn, Jr., chmn. & CEO H. L. Airington, pres. & COO Unvested shares awarded under Long-Term Incentive Plan: chmn., 28,000; pres., 18,000.	950 600	6 33	0 0	7793 2625	151	5 3	15.4	100.7	3 3
REAT NORTHERN EKOOSA	3588.1 22.3	W. R. Laidig, chmn., pres. & CEO J. G. Crump, Jr., exec. v-p & COO	708 413	20 40	103 101	2703 1161	201	2 1	15.6	374.9	1 1
TL. PAPER	9533.0 16.1	J. A. Georges, chmn. & CEO D. I.J. Wang, exec. v-p	1225 507	32 11	19 8	3253 1406	197	2 1	11.1	389.4	2 1
IMES IVER	5623.4 11.0	B. S. Halsey, chmn. & CEO R. C. Williams, pres. & COO	920 786	22 22	323 0	2508 1870	113	3 3	10.3	-7.0	3 3
IMBERLY-CLARK	5393.5 20.3	D. E. Smith, chmn. & CEO R. H. Sonnentag, pres.-European Ops.	1205 525	10 7	0 315	5216 1948	187	3 2	18.3	32.5	3 2
LEAD	4463.9 23.2	B. R. Roberts, chmn. ‡ S. C. Mason, pres. ‡ Shares of restricted stock awarded under Incentive Plan: chmn., 3,131; pres., 1,878.	1195 827	13 12	2892 4599	8165 7784	185	4 5	17.0	156.8	3 3
COTT PAPER	4726.4 20.6	P. E. Lippincott, chmn. & CEO J. R. Leaman, Jr., exec. v-p; pres.-sub. Shares of restricted stock granted: chmn., 10,000; exec. v-p, 5,000.	1238 768	54 68	522 141	3744 2116	163	3 2	16.4	21.4	2 2



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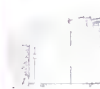


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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
UNION CAMP	2660.9	R. E. Cartledge, chmn., pres. & CEO	792	20	0	2092	143	2	14.2	161.8	1
	18.9	J. M. Piette, vice-chmn.	493	3	103	1902		2			1
WESTVACO	2187.2	D. L. Luke III, chmn.	817	13	0	3617	166	3	12.7	51.2	2
	15.6	J. A. Luke, pres. & CEO	717	27	762	4493		4			3
WEYERHAEUSER	10004.2	G. H. Weyerhaeuser, chmn. & CEO	1100	19	0	2780	137	3	10.9	161.5	2
	13.5	J. W. Creighton, Jr., pres. & COO	620	41	0	1435		2			2
25 PERSONAL CARE PRODUCTS (CONSUMER PRODUCTS)											
AVON PRODUCTS	3063.0	J. E. Preston, chmn. & CEO	737	-7	0	2687	90	2	NM	NM	NA
	46.6	H. B. Waldron, chmn. & CEO†	674	-31	0	2789		4			NA
Shares of restricted stock granted: present chmn., 55,000.											
BAUSCH & LOMB	978.3	D. E. Gill, chmn. & CEO	927	14	1283*e	4397	143	3	15.5	0.9	3
	16.5	T. C. McDermott, pres. & COO	586	11	701*e	2919		3			4
*Includes \$841,000 & \$532,000, respectively, for taxes. Shares awarded: chmn., 8,080; pres., 4,930.											
CLOROX	1354.0	C. R. Weaver, chmn. & CEO†	664	15	2513	4497	141	3	17.6	3.0	3
	18.3	J. W. Collins, pres. & COO†	462	9	1347	3242		3			3
COLGATE-PALMOLIVE	4734.3	R. Mark, chmn., pres. & CEO	1236	25	0	3489	157	2	10.6	-28.5	4
	13.4	W. S. Shanahan, sr. exec. v-p & COO	567	16	420	2069		2			4
Shares of stock awarded: chmn., 3,568; sr. ex. v-p, 2,140.											
GILLETTE	3581.2	C. M. Mockler, Jr., chmn. & CEO	957	6	0	7070	204	3	NA	NA	NA
	NA	A. M. Zeien, vice-chmn.	594	18	850	2801		2			NA
INTL. FLAVORS & FRAGRANCES	839.5	E. P. Grisanti, chmn. & pres.	603	14	0	1879	134	1	17.1	13.4	1
	18.5	H. Fields, sr. v-p	411	13	77	1389		2			2
PROCTER & GAMBLE	20368.0	J. G. Smale, chmn. & CEO	1300	5	755	4752	136	3	11.4	35.0	3
	16.3	J. E. Pepper, pres.*	899	31	0	2244		3			3
*Does not include \$150,000 paid in 1986 for service abroad. Awarded 3,371 shares restricted stock.											
26 PUBLISHING, RADIO & TV BROADCAST (SERVICE)											
AMERICAN TV & COMMUNICATIONS	811.9	J. H. Doolittle, pres.	521*	45	411	1886	NA	NA	25.8	429.7	1
	29.4	J. J. Collins, chmn. & CEO	508	NA	189	NA	NA	NA			NA
*Also received \$545,000 allowance for relocation. Shares of restricted stock awarded: pres., 8,425; chmn., 5,000.											
CAPITAL CITIES/ABC	4773.4	T. S. Murphy, chmn. & CEO	1031	29	2922	11363	162	5	11.8	-16.0	5
	13.4	D. B. Burke, pres. & COO	970	26	2922	10979		5			5
CBS	2777.7	L. A. Tisch, pres. & CEO	1253*	6	0	NA	155	NA	14.9	-69.9	NA
	12.3	G. F. Jankowski, v-p; chmn.-sub.	730	-9	440	3222		3			5
*Also received \$228,000 from Loew's Corp. under employment agreement.											
DOW JONES	1603.1	W. H. Phillips, chmn. & CEO	740	6	401	3316	100	3	22.9	-14.9	3
	19.7	R. Shaw, pres. & COO	560	10	320	2416		3			3
DUN & BRADSTREET	4267.4	C. W. Moritz, chmn. & CEO	1120	15	1308	6348	138	4	23.4	9.7	4
	23.8	R. E. Weissman, pres. & COO	790	19	262	3992		4			3
GANNETT	3314.5	A. H. Neuhaerth, chmn.	1500	0	0	8034	126	4	19.8	2.7	4
	20.4	J. J. Curley, pres. & CEO	1225	14	738	4187		4			4
Stock Incentive Rights awarded: chmn., 135,000.											
KNIGHT-RIDDER	2083.3	A. H. Chapman, Jr., chmn.	866	-10	4167	8988	122	5	17.4	-6.2	4
	17.9	J. K. Batten, pres. & CEO	743	8	87	2514		3			3
LIN BROADCASTING	225.5	D. A. Pels, chmn. & pres.	1030	8	0	19278	385	4	15.0	73.3	5
	19.7	R. S. Cecil, pres.-LIN Cellular Group	320	9	873	1746		1			2
MCGRAW-HILL	1818.0	J. L. Dionne, chmn. & CEO	1034	43	307	3215	140	3	19.3	5.9	3
	20.1	W. D. Serwatka, pres.-Info. Svcs. Co.	397	34	47	NA		NA			NA
Shares of restricted stock granted: chmn., 15,600; pres., (sub.), 8,600.											
NEW YORK TIMES	1700.0	A. O. Sulzberger, chmn. & CEO; publ.†	662	-8	361	3454	115	3	18.9	-7.1	3
	18.4	W. E. Mattson, pres. & COO†	524	-4	828	4373		4			4
TIMES MIRROR	3259.4	R. F. Erburu, chmn. & CEO	1200	-8	573e	4185	123	4	23.1	-19.2	3
	19.7	D. A. Lavenhol, pres.	760	5	212e	2232		3			2
TRIBUNE	2334.8	S. R. Cook, pres. & CEO; publ.-Chic. Trib.	1064	15	4789	10080	147	5	19.1	29.9	4
	17.7	J. W. Madigan, exec. v-p	700	14	2706	10947		5			4
WASHINGTON POST	1367.6	K. Graham, chmn.	653	-4	777	3390	181	2	28.6	-0.8	2
	32.4	R. D. Simmons, pres.	596	-5	643	2974		3			2
27 RAILROADS (TRANSPORTATION)											
BURLINGTON NORTHERN	4699.5	R. M. Bressler, chmn.*	2100	75	3176e	8159	124	5	5.5	76.2	3
	22.5	G. Grinstein, pres. & CEO	1350	93	395	NA		NA			NA
*Includes \$2.4 mil. for employment contract termination.											
CONSOLIDATED RAIL	3490.0	L. S. Crane, chmn. & CEO†	734**	17	0	1712	NA	NA	10.7	-67.4	5
	7.6	R. D. Sanborn, pres. & COO*	500	NA	0	NA		NA			NA
*Passed away 2/89. **Received \$1.65 mil. (special pension obligation) following retirement. 12/88.											
CSX	7592.0	H. T. Watkins, chmn. & CEO	1290	11	0	4190	117	4	5.3	NA	4
	-1.5	J. W. Snow, pres. & COO; chmn. -CSXT	815	18	0	2803		4			3

When it comes to their information systems, there is one thing all CEO's can agree upon:

“There has to be a better way.”

Whether CEO, CIO, or MIS/DP, you've said it. And you've heard it said. There has to be a better way.

It's a statement that embodies all the frustrations you've faced in building, maintaining, and maximizing the potential of your information system.

Fortunately, we at Hewlett-Packard started paying attention to your frustrations years ago.

"\$10,000,000 invested in systems and software and I still can't find out what I need to know when I need to know it."

The result?

There is a better way. And we can give it to you today in the form of significantly lower computing costs. True multivendor connectivity. A software technology that dramatically increases the usefulness of your system. And unmatched service and support.

HP can cut your computing costs by 29%.

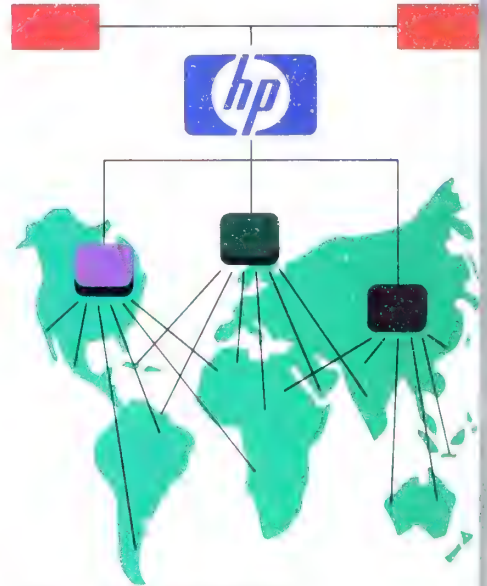
It's true. The chart at left shows you how investments in HP systems comparable to systems from IBM or DEC can reduce your cost of ownership by up to 29%*. And do so while giving you considerable benefits in terms of performance and reliability.

It's all made possible by our Precision Architecture systems. Systems which cost less because they have simpler designs, with fewer instructions and fewer components. Systems which allow us to meet the computing needs of any organization, from the smallest to the largest.

HP gives you true multivendor networking.

Chances are you already have IBM or DEC and other computers within your company. Hewlett-Packard is committed to making these computers function as if they were made for one another.

We achieve that goal through an unswerving dedication to an open networking strategy we call HP AdvanceNet.



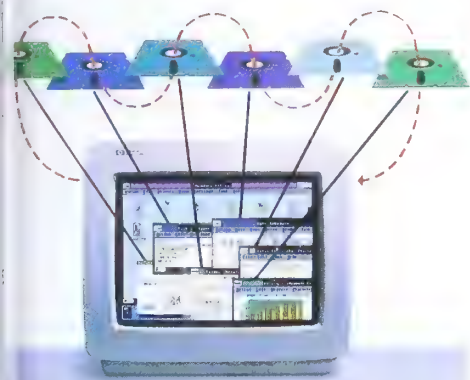
"We either have to get all our computers talking to each other...or pray for a 9-day week."

It's a strategy that operates in strict conformance with industry standards. A strategy that we back with over 300 products for both local office and company-wide networking. And, finally, it's a strategy that stands in stark contrast to the proprietary approach often taken by other vendors.



*Note: The cost-of-ownership figures reflect the initial purchase price and 5-year hardware and software support costs for servers configured with operating systems, memory, mass storage, and terminal connections. Prices as of Feb. 15, 1989.

There is a better way.



HP's NewWave integrates diverse software programs.

HP lets you fully exploit all the information in your system.

At last. A technology that integrates the software programs in your personal computers. A technology that gives users a simplified, unified way of accessing, manipulating, and sharing information. Information housed in mainframes, in minicomputers, in workstations and PC's.

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It's HP's NewWave environment. With it, you can greatly expand the usefulness of software programs. Greatly reduce the amount of time spent performing repetitive tasks. And greatly increase user productivity.

All of which is accomplished by a technology that adheres to standards† and enjoys widespread industry support. All of which makes your information system that much more cost-efficient. All of which makes good sense.

HP promises you the best service and support in the industry.

Over the past six years, in the Data-pro User Surveys, Hewlett-Packard has achieved the best overall record among industry leaders for customer support satisfaction.

"The problems with our computer systems begin with the companies that make them...they're slow to respond and far too proprietary."

It's a record of which we're very proud. A record based on averages across six key service and support

categories. A record that says we work in partnership with each of our customers, and that we care as much about their business as we do about our own.

In the end, it's really very simple. Only by acknowledging your frustrations and finding real-world solutions have we been able to develop networked computer systems that offer you clear competitive advantages. And only by continuing to work with you will we be able to help you meet the considerable challenges of the future.



We at Hewlett-Packard have structured our entire company around a very simple idea: giving our customers everything they need to compete more effectively.

Today, under that mandate and backed by the widest range of systems, peripherals, PC's, and instruments in the industry, we are delivering the "better way" demanded by American business.

John Young
President & CEO
Hewlett-Packard



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† HP's NewWave software technology is based upon and extends the capabilities of well-accepted PC and workstation environments: Microsoft® Windows, Presentation Manager, and OSF/Motif.

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES \$ MILLIONS ROE %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
NORFOLK SOUTHERN	4461.6 12.3	A. B. McKinnon, chmn., pres. & CEO K. W. Maxfield, chmn.-sub. *Includes \$388,000 relating to award obligations of previous owner of North American Van Lines.	1108 669*	38 NA	0 0	2427 NA	129	2 NA	8.7	17.3	2 NA
SANTA FE SOUTHERN PACIFIC	3143.6 30.4	R. D. Krebs, chmn., pres. & CEO W. J. Swartz, vice-chmn.; pres.-SF RR Restricted stock granted: chmn., 30,000; vice-chmn., 23,500.	1175 940	32 43	0 0	2836 2192	127	2 2	10.6	272.9	1 1
UNION PACIFIC	6068.0 12.3	D. Lewis, chmn., pres. & CEO M. H. Walsh, chmn. & CEO-Railroad Co.	1350 850	13 13	0 0	6090 NA	130	4 NA	4.4	14.1	4 NA
28 RETAILING (FOOD) (SERVICE)											
ALBERTSON'S	6773.1 21.5	W. E. McCain, chmn. & CEO G. G. Michael, v.-chmn., CFO & CDO	970 576	26 14	0 777	6368 2994	242	3 2	19.1	31.2	4 3
WINN-DIXIE STORES	9088.3 17.2	J. Kufeldt, pres. & sr. v-p A. D. Davis, chmn. & pres.	490 468	15 3	0 0	1340 1359	129	1 2	16.3	2.9	1 2
29 RETAILING (NONFOOD) (SERVICE)											
K MART	27655.1 17.3	J. E. Antonini, chmn., pres. & CEO L. M. Parkin, exec. v-p-sub.	925 394	45 14	64 657	2259 2138	163	2 2	15.8	20.2	2 3
THE LIMITED	4070.8 29.7	L. H. Wexner, chmn. & pres. M. Trust, pres.-Mast	1031 819	10 59	0 0	2898 5059	134	3 4	30.4	-17.5	2 3
MELVILLE	6780.4 20.8	S. P. Goldstein, chmn., pres. & CEO M. A. Friedheim, exec. v-p	1073 668	25 44	146e 14e	2630 1548	158	2 2	19.7	4.2	2 2
NORDSTROM	2327.9 19.3	B. A. Nordstrom, co-chmn. J. N. Nordstrom, co-chmn.	454 454	34 34	180 0	2278 1631	258	1 1	17.6	20.9	2 2
PRICE	4432.0 19.7	R. E. Price, pres. & CEO R. M. Libenson, vice-chmn. & exec. v-p	230 199	0 0	0 0	686 593	107	1 1	19.5	-30.8	1 1
SEARS, ROEBUCK	50251.0 7.4	E. A. Brennan, chmn., pres. & CEO P. J. Purcell, chmn. & CEO-Dean Witter	1386 1125	-8 4	501 553	5120 NA	120	4 NA	10.0	-33.6	3 NA

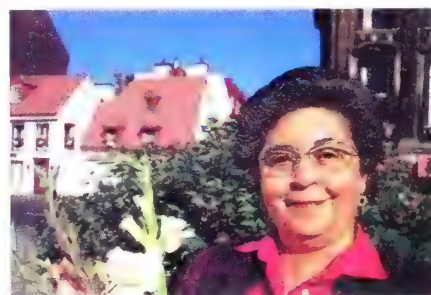


LOOKING DOWN THE MOUNTAIN TERRACE, QUÉBEC CITY

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
WALGREEN	4980.4 18.6	C. R. Walgreen III, chmn. & CEO F. F. Canning, pres. & COO	648 550	10 10	146 125	2479 2117	114	3 3	17.9	-5.1	3 3
30 SERVICE INDUSTRIES (SERVICE)											
AMERICAN MEDICAL INTERNATIONAL	3016.8 10.4	W. L. Weisman, chmn. & CEO* G. E. Burleson, pres. & COO *Received \$3.056 mil from employment agreement upon his resignation Aug. 30, 1988.	650 400	0 33	0 0	1950 1077	91	3 2	3.7	-35.8	5 5
BROWNING-FERRIS	2171.8 21.7	H. J. Phillips, Sr., chmn. & CEO J. E. Drury, pres. & COO	642 530	11 11	0 0	1775 1457	179	1 2	19.9	6.6	2 1
CHEMICAL WASTE MANAGEMENT	700.2 22.3	J. E. Dempsey, pres. B. D. Tobecksen, v-p-fin. & treas.	564 214	6 27	0 0	1417 606	NA NA	NA NA	18.6	-22.4	2 1
L. R. DONNELLEY & SONS	2878.4 15.8	J. B. Schwemm, chmn. & CEO J. R. Walter, pres.	669 405	2 25	292 55	3587 NA	116	3 NA	16.8	-4.4	3 NA
FEDERAL EXPRESS	4244.5 13.7	F. W. Smith, chmn., pres. & CEO J. L. Barksdale, exec. v-p & COO	649 418	51 32	0 253	1567 1320	84	2 3	14.4	13.6	2 2
LUOR	5513.5 11.0	D. S. Tappan, Jr., chmn. & CEO L. G. McCraw, pres.	899 507	100 84	0 0	1939 1102	154	2 1	-2.0	NA	1 1
GENUINE PARTS	2942.0 21.0	W. Looney, chmn. & CEO E. Dolive, vice-chmn.	767 559	17 16	0 198	1933 1613	151	2 2	18.8	27.2	2 2
W.W. GRAINGER	1535.5 17.2	D. W. Grainger, chmn. W. N. Caldwell, pres.	638 507	4 4	0 740	1763 2913	147	2 3	15.2	31.3	2 3
HOSPITAL CORP OF AMERICA	4111.2 16.0	T. F. Frist, Jr., chmn., pres. & CEO R. E. Mick, sr. v-p & CFO Shares of restricted stock granted: chmn., 4,255; sr. v-p, 1,702.	894 360	45 35	1430 0	4114 NA	129	3 NA	7.2	18.0	4 NA
HUMANA	3580.3 19.8	D. A. Jones, chmn. & CEO W. Cherry, pres. & COO	991 720	14 14	0 1322	2397 3073	89	3 4	14.6	-17.5	3 4
NATIONAL MEDICAL ENTERPRISES	3432.8 16.8	R. K. Eamer, chmn. & CEO† L. Cohen, pres. & COO† Shares of restricted stock awarded: chmn., 795,029; pres., 515,897.	1590 1174	57 57	349 231	4299 3211	104	4 4	16.5	43.8	3 3



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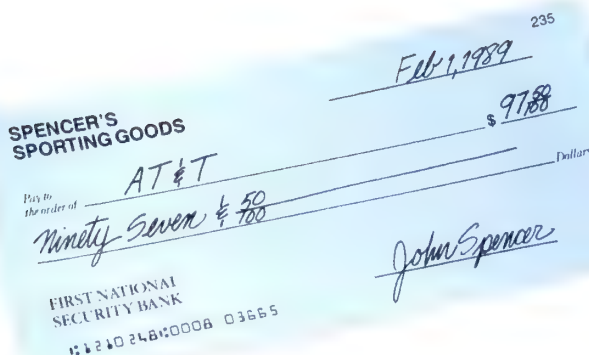
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PREMIER INDUSTRIAL	565.6 33.8	M. L. Mandel, chmn. & CEO R. Warren, vice-chmn. & COO	375 287	7 12	0 82	1052 1024	150	<u>1</u> <u>1</u>	24.7	95.5	<u>1</u> <u>1</u>
RYDER SYSTEM	5029.6 8.6	M. A. Burns, chmn., pres. & CEO D. R. Parker, sr. ex. v-p & COO-sub. Shares of restricted stock granted: sr. exec. v-p, 7,500.	915 607	-8 -6	382 192	5051 2083	124	<u>4</u> <u>3</u>	12.1	-39.7	<u>4</u> <u>4</u>
WASTE MANAGEMENT	3565.6 22.5	D. L. Buntrock, chmn. P. B. Rooney, pres.	1400 1060	8 12	7002 6425	18753 22932	239	<u>5</u> <u>5</u>	21.1	49.1	<u>4</u> <u>4</u>
31 STEEL (INDUSTRIAL: LOW TECH)											
BETHLEHEM STEEL	5488.8 25.1	W. F. Williams, chmn. C. H. Barnette, gen. couns., sr. v-p Shares of restricted stock granted: chmn., 5,100; gen. couns., 3,100.	505 300	10 9	444 184	2035 1105	149	<u>2</u> <u>1</u>	1.8	NA	<u>1</u> <u>1</u>
INLAND STEEL INDUSTRIES	4068.0 15.1	F. W. Luerssen, chmn. & CEO-Inds. & Co. R. J. Darnall, pres. & COO; pres.-Co. Restricted/performance shares awarded: chmn., 25,842; pres., 14,767.	940 670	46 61	437 320	2562 2010	187	<u>2</u> <u>2</u>	8.2	NA	<u>1</u> <u>2</u>
32 TELECOMMUNICATIONS (TELECOMMUNICATIONS)											
ALLTEL	1068.5 15.7	W. W. Case, chmn. J. T. Ford, pres. & CEO	664 653	-9 11	0 0	1912 1768	206	<u>2</u> <u>1</u>	14.6	12.4	<u>2</u> <u>2</u>
AMERITECH	9903.3 15.8	W. L. Weiss, chmn. & CEO O. J. Wade, pres.-Ameritech Bell Gp.	1250 730	9 13	940 167e	5511 NA	157	<u>5</u> NA	15.5	9.1	<u>4</u> NA
AT&T	51974.0 -14.6	R. E. Allen, chmn. & CEO C. Marshall, vice-chmn.	1284 841	43 11	451e 480e	3632 3102	129	<u>4</u> <u>5</u>	0.4	NM	<u>5</u> <u>5</u>
BELL ATLANTIC	10880.1 14.3	T. E. Bolger, chmn. & CEO† P. A. Campbell, vice-chmn. & CFO Shares awarded under performance plan: chmn., 6,285; vice-chmn., 3,327.	1287 670	6 7	85 195	3705 2092	155	<u>3</u> <u>3</u>	14.2	4.0	<u>4</u> <u>3</u>
BELLSOUTH	13596.9 14.1	J. L. Clendenin, chmn., pres. & CEO J. B. White, Jr., v.-chmn.-fin. & admin.† Shares awarded under Long-Term Investment Plans: chmn., 3,834; vice-chmn., 1,242.	1165 543	4 39	0 0	3411 1298	142	<u>4</u> <u>2</u>	14.0	1.2	<u>3</u> <u>2</u>

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fee is only about half what AT&T charges.

Our monthly service charge is lower. So are our tapered rates that go down as your call volume goes up. So Sprint's FÖNLINE 800 costs less than AT&T's 800 READYLINE.†

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG-TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
ENTEL	1094.9 11.9	J. P. Frazee, Jr., chmn., pres. & CEO J. S. Vanderwoude, exec. v-p Shares awarded under employment agreement: chmn., 4,800.	726 370	63 NA	341 205	1943 NA	175	② NA	12.8	-20.9	③ NA
CINCINNATI BELL	738.4 17.0	D. H. Hibbard, chmn. & CEO; chmn.-CBT† J. T. LaMacchia, pres. & COO†	645 404	27 32	250 91	1930 NA	338	① NA	15.0	30.5	② NA
ONTEL	2963.7 19.8	C. Wohlstetter, chmn. & chmn.-ex. comm.† D. W. Weber, pres. & CEO†	1266 856	83 81	4294 103	NA NA	181	NA NA	13.6	17.0	NA NA
TE	16459.8 14.5	J. L. Johnson, chmn. & CEO A. L. Rayfield, sr. v-p	1114 644	41 6	148 97	2883 2005	169	③ ②	14.5	NA	① ①
ICI	5137.0 28.1	W. G. McGowan, chmn. V. O. Wright, vice-chmn.	1353 1201	84 97	0 0	2759 NA	201	② NA	0.1	164.9	② NA
RETRO MOBILE CTS	67.3 NA	G. L. Lindemann, chmn. & CEO J. E. Brennan, pres. & COO	387 243	72 36	0 0	786 568	NA NA	NA NA	NA	NA	NA NA
TYNEX	12660.8 14.0	D. C. Staley, chmn. & CEO W. C. Ferguson, vice-chmn. Shares distributed under Long-Term Incentive Plan: chmn., 7,493; vice-chmn., 4,251.	1070 682	5 7	61 28	3466 NA	158	③ NA	13.8	6.4	③ NA
PACIFIC TELESIS	9483.0 14.7	S. Ginn, chmn., pres. & CEO J. E. Hulse, vice-chmn. & CFO	774 559	45 61	478 394	2644 1930	169	③ ②	13.6	15.7	② ②
SOUTHERN N. E. ELECTCOMM	1582.6 13.7	W. H. Monteith, Jr., chmn., pres. & CEO R. M. Donofrio, sr. v-p Shares distributed under Long-Term Investment Plan: chmn., 1,837; sr. v-p, 695.	440 257	-1 14	0 0	1264 688	140	① ①	13.3	12.9	① ①
SOUTHWESTERN ELL	8452.7 12.6	Z. E. Barnes, chmn. & CEO R. G. Pope, vice-chmn.-corp. dev. & CFO	1551 838	37 61	1698e 1022e	5681 2960	166	⑤ ④	12.8	-6.1	⑤ ④
UNITED TELECOMMS	6493.0 7.4	W. T. Esrey, pres. & CEO-Cp. & US Sprint† P. H. Henson, chmn.† Shares awarded under Long-Term Investment Plan: pres., 6,631; chmn., 4,690.	931 818	46 29	0 685	2172 2956	220	② ③	4.8	642.7	③ ④
WEST	9220.6 14.5	J. A. MacAllister, chmn. & CEO R. D. McCormick, pres.	1399 886	62 55	1021 597	3971 2539	152	④ ④	13.6	9.0	④ ③

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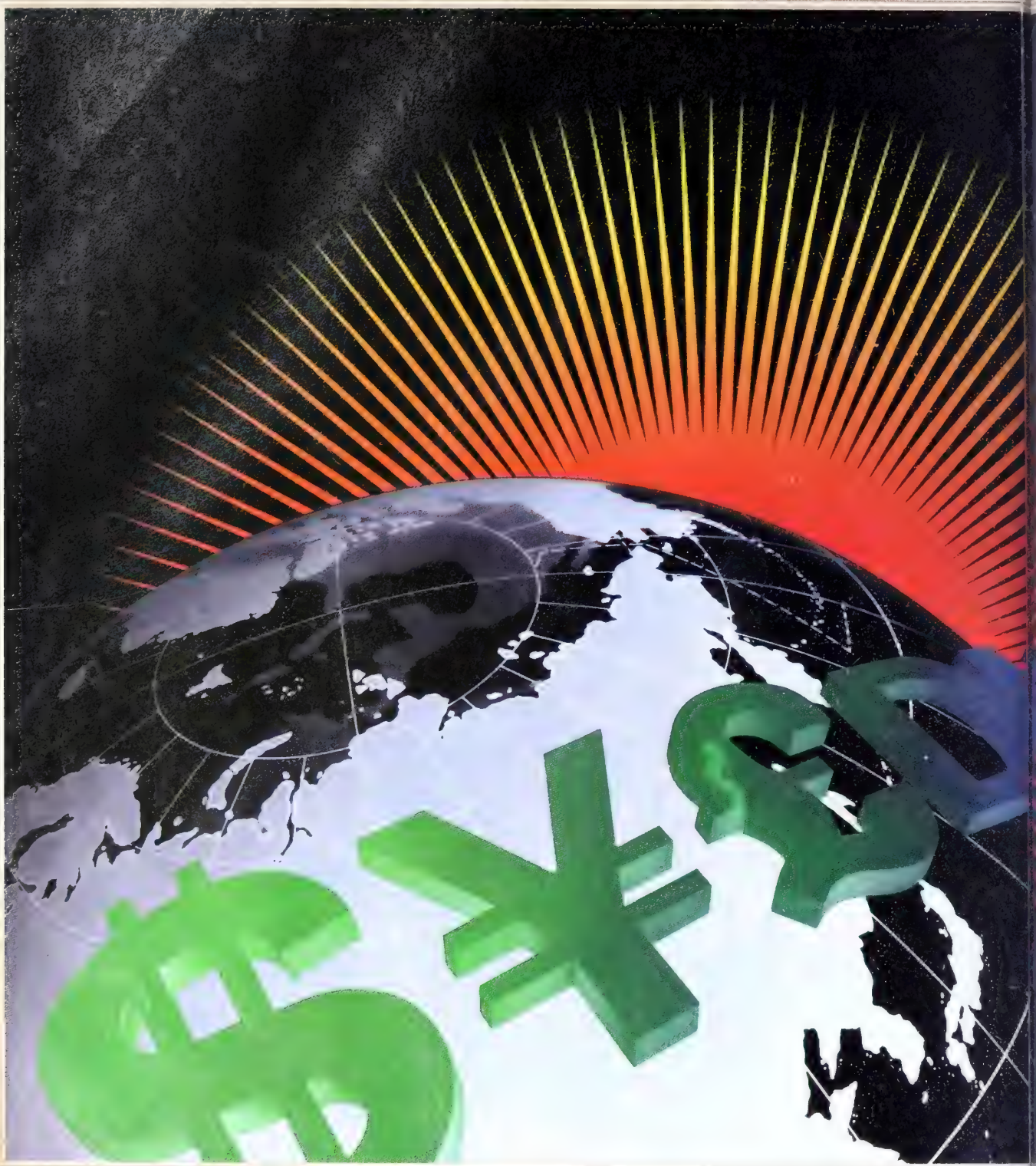


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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
2 WEST VECTOR GROUP											
	133.0	J. E. Defeo, pres. & CEO	301	54	39	NA	NA	NA	NA	NA	NA
	-14.5	J. C. O'Neil, v-p, gen. couns. & secy.	208	36	24	NA	NA	NA	NA	NA	NA
3 TEXTILES, APPAREL (CONSUMER PRODUCTS)											
KE	1518.9	P. H. Knight, chmn. & pres.	250	NA	0	NA	196	NA	21.4	54.2	NA
	28.8	R. E. Nelson, v-p	225	2	0	649		<u>1</u>			<u>1</u>
EBOK INTERNATIONAL	1785.9	P. B. Fireman, chmn. & CEO	11439	-26	0	39916	273	<u>5</u>	30.8	-54.7	<u>5</u>
	19.9	C. J. LaBonte, pres. & COO	1049	28	0	NA		NA			NA
	2516.1	L. R. Pugh, chmn. & CEO	985	-8	0	6406	120	<u>3</u>	16.6	-37.0	<u>4</u>
	15.9	R. E. Gregory, Jr., pres. & prin. oper. off.	770	-7	0	4042		<u>4</u>			<u>5</u>
EST POINT- PPERELL	2353.3	J. L. Lanier, Jr., chmn. & CEO	828	7	178e	2438	219	<u>1</u>	8.9	63.9	<u>3</u>
	10.1	D. J. Keller, pres. & COO	627	10	558e	2096		<u>2</u>			<u>3</u>
4 TIRE & RUBBER (INDUSTRIAL: LOW TECH)											
DODYEAR	10810.4	R. E. Mercer, chmn. & CEO*	1279	2	0	6215	179	<u>4</u>	16.2	101.1	<u>3</u>
	17.3	T. H. Barrett, chmn., pres. & CEO	875	1	0	3492		<u>3</u>			<u>3</u>
*Resigned as CEO 12/88 and chmn. effective 3/31/89.											
5 TOBACCO (CONSUMER PRODUCTS)											
AMERICAN BRANDS	11980.0	W. J. Alley, chmn. & CEO	1351	37	276	3376	218	<u>1</u>	17.1	24.1	<u>2</u>
	21.1	S. G. Cameron, chmn.-Gallaher Ltd.†	884	52	65	2018		<u>1</u>			<u>2</u>
ILIP MORRIS	31742.0	H. Maxwell, chmn. & CEO	1660	11	2859	8235	252	<u>3</u>	26.7	1.5	<u>3</u>
	26.9	J. A. Murphy, pres.	1189	7	0	7809		<u>4</u>			<u>4</u>
R NABISCO	16956.0	F. R. Johnson, pres. & CEO*	1836	6	19235	25022	307	<u>4</u>	20.0	27.5	<u>5</u>
	24.2	E. A. Horrigan, Jr., chmn. & CEO-sub.*	1280	8	20450	25160		<u>5</u>			<u>5</u>
*Resigned effective 2/9/89 & 3/1/89, respectively.											
IT	618.5	L. F. Bantle, chmn. & CEO	1725	12	430	5137	256	<u>2</u>	32.1	23.7	<u>2</u>
	35.8	N. A. Buoniconti, pres. & COO	1206	17	0	4398		<u>3</u>			<u>2</u>



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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES \$ MILLIONS ROE	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
36 TRUCKING (TRANSPORTATION)											
ALEXANDER & BALDWIN	664.5	R. J. Pfeiffer, chmn. & CEO†	1490	21	525	5706	236	$\frac{3}{3}$	21.2	35.2	$\frac{2}{2}$
	22.6	J. C. Couch, pres. & COO†	644	17	0	2327		$\frac{1}{1}$			$\frac{2}{2}$
37 UTILITIES (UTILITIES)											
AMERICAN ELECTRIC POWER	4840.8	W. S. White, Jr., chmn. & CEO	621	6	0	1758	145	$\frac{3}{3}$	13.3	20.5	$\frac{3}{3}$
	14.8	R. E. Disbrow, pres.; v-p-subs.	405	7	0	1131		$\frac{3}{3}$			$\frac{2}{2}$
BALTIMORE G&E	1863.7	G. V. McGowan, chmn. & CEO	527	45	0	1222	147	$\frac{2}{2}$	15.1	0.6	$\frac{1}{1}$
	14.5	E. A. Crooke, pres. & COO-utility opers. Shares of restricted stock awarded: chmn., 7,700; pres., 4,200.	335	36	0	803		$\frac{2}{2}$			$\frac{1}{1}$
CAROLINA POWER & LIGHT	2273.4	S. H. Smith, Jr., chmn., pres. & CEO	379	17	0	1015	151	$\frac{1}{1}$	11.3	-47.2	$\frac{4}{3}$
	7.1	W. E. Graham, Jr., vice-chmn.	226	14	0	611		$\frac{1}{1}$			$\frac{3}{3}$
CENTRAL & SOUTH WEST	2512.0	M. L. Borchelt, chmn., pres. & CEO	373	20	52	1064	141	$\frac{2}{5}$	14.1	-19.0	$\frac{2}{4}$
	12.5	D. Chalker, chmn., pres. & CEO†	371	-19	339	1691		$\frac{5}{5}$			$\frac{4}{4}$
CMS ENERGY	2942.7	W. T. McCormick, Jr., chmn. & CEO-Cp. & sub.	625	23	329	1863	325	$\frac{1}{1}$	9.7	NA	$\frac{1}{1}$
	16.4	S. K. Smith, Jr., pres.; vice-chmn.-sub. Shares of restricted stock granted: chmn., 25,000; pres., 10,000.	402	76	0	NA		NA			NA
COMMONWEALTH EDISON	5613.3	J. J. O'Connor, chmn.	492	11	0	1318	143	$\frac{2}{2}$	12.5	-36.5	$\frac{3}{3}$
	9.1	B. L. Thomas, pres.	284	20	0	726		$\frac{2}{2}$			$\frac{3}{3}$
CONSOLIDATED EDISON OF NY	5108.8	A. Hauspurg, chmn., pres. & CEO	744	7	110	2201	140	$\frac{4}{4}$	12.9	0.5	$\frac{3}{4}$
	13.4	J. V. Thornton, vice-chmn.†	516	7	55	1502		$\frac{4}{4}$			$\frac{4}{4}$
DETROIT EDISON	3102.2	W. J. McCarthy, Jr., chmn. & CEO	451	-12	0	1392	141	$\frac{3}{2}$	5.3	NM	$\frac{5}{5}$
	-12.9	E. L. Grove, Jr., vice-chmn. & CFO	296	-13	0	917		$\frac{2}{2}$			$\frac{5}{5}$
DOMINION RESOURCES	3344.1	W. W. Berry, chmn. & CEO; chmn.-subs.	558	-2	65	1659	144	$\frac{3}{3}$	13.8	13.8	$\frac{2}{2}$
	13.6	T. E. Capps, pres. Shares of restricted stock awarded: chmn., 438; pres., 250. Performance shares awarded: chmn., 1,503; pres., 2,174.	447	17	0	1155		$\frac{3}{3}$			$\frac{2}{2}$
DUKE POWER	3627.0	W. S. Lee, chmn.	533	18	0	1421	154	$\frac{2}{3}$	12.9	-10.8	$\frac{3}{3}$
	11.5	D. W. Booth, pres.	380	14	0	1033		$\frac{3}{3}$			$\frac{3}{3}$



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COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1987		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
IRON	5708.1 6.8	K. L. Lay, chmn. & CEO F. E. Haglund, chmn. & CEO-Oil & Gas sub. Shares of restricted stock vested: chmn., 1,540.	977 741	-7 NA	0 0	2821 NA	98 NA	5 NA	-2.9	11.7	4 NA
ORIDA PROGRESS	2002.0 13.7	A. H. Hines, Jr., chmn. & CEO L. H. Scott, vice-chmn.	554 345	11 -15	0 0	1567 1061	137 1061	3 3	NA	NA	NA NA
L GROUP	5853.5 13.7	M. McDonald, pres. & CEO J. J. Hudiburg, chmn. & CEO-FPL Co. Shares of restricted stock granted: chmn.-Co., 11,200.	844 638	58 19	0 0	1826 1598	132 1598	4 5	13.0	-4.6	3 4
INOIS POWER	1284.7 6.2	W. J. Kelley, chmn. & pres. C. W. Wells, exec. v-p	383 204	8 8	0 0	1062 569	116 569	2 1	11.7	-53.8	4 3
IDDLE SOUTH ILITIES	3565.4 8.5	E. Lupberger, chmn. & pres.; chmn.-sub. J. L. Cowan, sr. v-p & sys. exec./fin.-Sys.	369 225	-4 NA	0 0	1096 NA	152 NA	1 NA	8.9	-17.6	3 NA
AGARA MOHAWK OWER	2800.5 8.5	W. J. Donlon, chmn. & CEO J. M. Endries, pres.	309 218	27 48	0 0	807 517	87 517	2 2	7.4	-40.0	4 5
ORTHERN STATES OWER	2006.5 13.6	J. J. Howard, chmn., pres. & CEO C. J. Blair, sr. v-p-electric utility Shares of restricted stock awarded: chmn., 4,204; sr. v-p, 1,292.	526 230	-31 6	0 0	NA 622	146 622	NA 1	14.1	-9.0	NA 1
IO EDISON	2142.6 7.4	J. T. Rogers, Jr., pres.; chmn.-Penn. Power D. W. Tschappat, exec. v-p & COO	455 303	4 3	0 0	1320 877	151 877	2 2	11.8	-48.3	4 4
IFIC TERPRISES	5932.0 11.9	P. A. Miller, chmn. & CEO J. R. Ukropina, pres. Shares of restricted stock awarded: chmn., 15,000; pres., 25,000.	992 695	17 24	294 132	4158 1842	99 1842	5 5	10.2	13.3	4 4
IFIC GAS ELECTRIC	7645.7 -0.6	R. A. Clarke, chmn. S. T. Skinner, vice-chmn.	548 390	2 8	0 0	1523 1098	115 1098	3 4	6.4	NM	5 5
IFICORP	3519.3 23.1	D. C. Frisbee, chmn. A. M. Gleason, pres. & CEO *Excludes \$773,000 to cover tax liability for annuity.	752* 504	10 7	0 0	2131 1458	138 1458	4 4	16.8	64.5	2 2
INHANDLE STERN	1261.6 -21.5	R. D. Hunsucker, chmn., pres. & CEO R. C. Dixon, group v-p	484 213	-20 NA	0 0e	2204 NA	84 NA	5 NA	-17.2	NM	5 NA

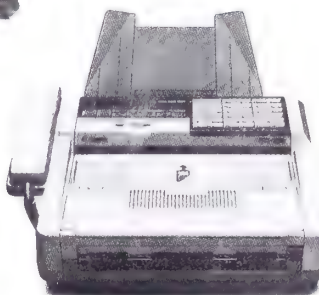


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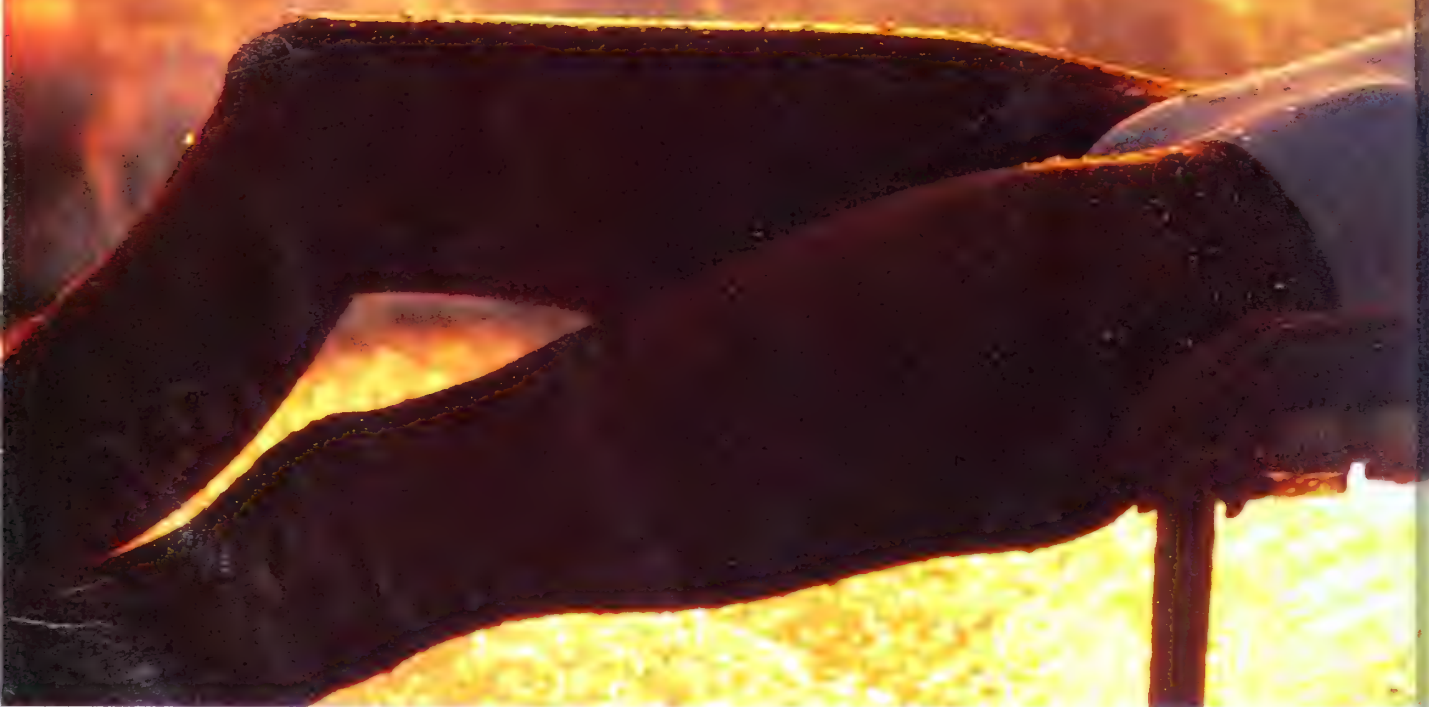


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EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1988 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1988 COMPENSATION			1986-88 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1987	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
PENNSYLVANIA POWER & LIGHT	2213.9 13.7	R. K. Campbell, chmn., pres. & CEO† J. T. Kauffman, exec. v-p-operations† Shares of restricted stock awarded: chmn., 1,720; exec. v-p, 1,150.	357 222	9 1	0 0	999 649	154	1 1	12.8	30.5	1 1
PHILADELPHIA ELECTRIC	3228.7 13.0	J. F. Paquette, Jr., chmn., pres. & CEO* C. A. McNeill, Jr., exec. v-p-nuclear* *Employed 3/88. **Excludes \$137,000 reimbursement to chmn.; includes \$69,000 forfeited benefits to exec. v-p.	446** 327**	NA NA	0 0	NA NA	153	NA NA	13.3	-4.2	NA NA
POTOMAC ELECTRIC POWER	1349.8 16.2	W. R. Thompson, chmn. E. F. Mitchell, pres.	940 435	45 14	0 0	2195 1165	139	4 4	16.8	-3.7	3 2
PUBLIC SERVICE ENTERPRISES	4394.7 13.5	E. J. Ferland, chmn., pres. & CEO E. L. Morris, v-p; sr. exec. v-p-PSE&G	652 420	30 8	0 0	1446 1120	144	3 3	12.5	4.7	2 3
CECORP	6252.7 15.0	H. P. Allen, chmn., pres. & CEO-Cp. & Eds. D. J. Fogarty, exec. v-p-Corp. & Edison Shares of restricted stock awarded: chmn., 10,000.	853 420	14 11	0 0	2268 1147	148	4 3	14.4	-1.7	3 3
SOUTHWESTERN PUBLIC SERVICE	790.9 15.6	B. Ballengee, chmn. & CEO W. R. Esler, pres. & COO	334 270	47 45	0 0	821 661	127	1 2	15.2	-18.7	1 2
ECO ENERGY	1034.0 14.6	H. L. Culbreath, chmn. T. L. Guzzie, pres. *Reflects compensation for partial year beginning 2/22/88. Also received \$96,000 for relocation.	360 257*	2 NA	285 0	1557 NA	160	2 NA	13.8	7.1	2 NA
TEXAS EASTERN	3481.3 12.4	D. R. Hendrix, pres. & CEO J. D. Cody, exec. v-p Shares awarded under Stock Plan: pres., 2,100; exec. v-p, 1,000.	635 432	13 11	53 24	1779 1073	90	4 4	8.6	NM	2 1
TEXAS UTILITIES	4153.7 11.4	J. S. Farrington, chmn. & CEO E. Nye, pres.	479 354	11 12	0 0	1244 934	122	3 3	13.0	-21.2	3 3
UNION ELECTRIC	2029.1 13.8	W. E. Cornelius, chmn. & CEO S. W. Smith, Jr., vice-chmn.	465 320	0 5	0 0	1362 916	140	3 2	14.9	-9.4	2 2

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

Abbott Laboratories 11 Air Life & Casualty 21 Amstar 8 Amstar's 28 Amstar Standard 9 Anderson & Baldwin 36 Armstrong Signal 9 Armstrong Steel 31 Armstrong & Decker 15 Boeing 1 Boise Cascade 24 Borden 13 Bristol-Myers 11 Browning-Ferris 30 Brunswick 17 Burlington Northern 27 Cabot 8 Campbell Soup 13 Capital Cities/ABC 26 Capital Holding 21 Carolina Power & Light 37 Caterpillar 15 CBS 26 Centel 32 Central & South West 37 Chase Manhattan 5 Chemical Banking 5 Chemical Waste 30 Chevron 20 Chrysler 4 Chubb 21 Cigna 21 Cincinnati Bell 32 Citicorp 5 Citizens & Southern 5 Clorox 25 CMS Energy 37 CNA Financial 21 Coastal 20 Coca-Cola 6 Coca-Cola Enterprises 6 Colgate-Palmolive 25 Commonwealth Edison 37 Compaq Computer 22 Computer Assoc. Intl. 22	Barnett Banks 5 Bausch & Lomb 25 Baxter International 11 Becton, Dickinson 11 Bell Atlantic 32 Bellsouth 32 Berkshire Hathaway 21 Bethlehem Steel 31 Black & Decker 15 Boeing 1 Boise Cascade 24 Borden 13 Bristol-Myers 11 Browning-Ferris 30 Brunswick 17 Burlington Northern 27 Cabot 8 Campbell Soup 13 Capital Cities/ABC 26 Capital Holding 21 Carolina Power & Light 37 Caterpillar 15 CBS 26 Centel 32 Central & South West 37 Chase Manhattan 5 Chemical Banking 5 Chemical Waste 30 Chevron 20 Chrysler 4 Chubb 21 Cigna 21 Cincinnati Bell 32 Citicorp 5 Citizens & Southern 5 Clorox 25 CMS Energy 37 CNA Financial 21 Coastal 20 Coca-Cola 6 Coca-Cola Enterprises 6 Colgate-Palmolive 25 Commonwealth Edison 37 Compaq Computer 22 Computer Assoc. Intl. 22	Conagra 13 Cons. 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W.) 30 Great Lakes Chemical 8 Great North. Nekosco 24 Great Western 21 GTE 32 Gulf & Western 9 Halliburton 23 Harris 12 Heinz (H. J.) 13 Hercules 8 Hershey Foods 13 Hewlett-Packard 22 Hilton Hotels 14 Himont 8 Holly Farms 13 Homestake Mining 18 Honeywell 16 Hospital Corp. of Amer. 30 Household Intl. 9 Humana 30 Illinois Power 37 Illinois Tool Works 19 IMC Fertilizer Group 8 Ingersoll-Rand 15 Inland Steel Industries 31 Intel 12 Intl. Business Machines 22 Intl. Flavors & Frag. 25 Intl. Paper 24	ITT 9 James River 24 Johnson & Johnson 11 Johnson Controls 16 K mart 29 Kellogg 13 Kerr-McGee 20 Kimberly-Clark 24 Knight-Ridder 26 Lilly (Eli) 11 Limited 29 Lin Broadcasting 26 Litton Industries 12 Lockheed 1 Loews 21 Lubrizol 8 Manufacturers Hanover 5 Marion Laboratories 11 Mariotti 14 Marsh & McLennan 21 Martin Marietta 1 Maytag 3 MCA 17 McDonald's 14 McDonnell Douglas 1 McGraw-Hill 26 MCI Communications 32 Mead 24 Melville 29 Merck 11 Merrill Lynch 21 Metro Mobile CTS 32 Microsoft 22 Middle South Utilities 37 Midlantic 5 Minnesota Min. & Mfg. 9 Mobil 20 Monsanto 8 Morgan (J. P.) 5 Morgan Stanley Group 21 Morton Thiokol 8 Motorola 12 Nalco Chemical 8 National City 5 Natl. 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TRANSPORTATION

THE COLLISION OVER COLLISION WAIVERS

Rental agencies are hotly debating whether to demolish them

If you've ever rented a car, you've probably run into the Collision Damage Waiver. An option that may amount to \$13 a day, the CDW relieves drivers of liability for damage to the cars they rent. The trouble is that the CDW can boost the cost of a rental far beyond the modest price quoted in large type in some newspaper ads.

But if the CDW is a sore spot for many travelers, it is an absolute red flag for the \$7 billion car rental industry. At issue: the push by legislators in Congress and more than 20 states to eliminate the CDW option and compel rental agencies and insurance companies, not consumers, to cover the costs of damages.

This surge in legislation has split the car rental companies into two camps. The big opponents of the separate CDW are the giants Hertz Corp. and Avis Inc. Frank A. Olson, chairman of Hertz, and Joseph V. Vittoria, head of Avis, are intense personal rivals, but they see eye to eye on the CDW issue. Both accuse some of their competitors

of fattening profits by luring travelers in with low rates, then scaring them into accepting costly CDW charges. Both would simply raise the base rental rates to cover damages.

'WORLD WAR III.' Says Vittoria: "Along came these second-tier companies who figured they could fool the public by threatening the driver with great loss unless he took the CDW." Adds Olson: "We want a level playing field, and we are engaged in World War III to get it." Opposing Hertz, Avis, and other big companies are a host of smaller opera-

tions, ranging from mom-and-pop agencies to Alamo Rent-A-Car Inc., the fifth biggest renter in the U.S. Under Chairman Michael Egan, Alamo has gone from a small-fry money-loser in 1975 to a \$500 million winner today. The agency succeeded by advertising rock-bottom rates and unlimited mileage to vacationing families.

Meanwhile, No. 1 rental agency Hertz says that its share of rentals at airports has declined from about 40% to 32% in the past ten years. Analyst Charles Finnie of Alex. Brown & Sons in Baltimore estimates that Alamo, which usually operates from off-airport sites, has gone from a 2% share of the market in 1982 to 7%.

Alamo's phenomenal success in the leisure market galls Hertz's Olson. "They got there through bait and hard sell," he says. Egan's printable response: "It's blatant hypocrisy. Hertz is only interested in this to improve profitability."

Egan, who denies that his agency twist arms to sell CDWs, says outlawing the waiver would only help Hertz and Avis and hurt companies such as Alamo—because the smaller renters would have to raise their low rates to factor in losses on damaged cars. Higher rates would make it tougher to attract leisure travelers who account for a much larger chunk of Alamo's business than they do for Hertz and Avis.

Egan likes to point out that Hertz's reputation with consumers is hardly spotless. Last year, for example, the company pleaded guilty to overcharging

NEW RULES FOR RENTALS

ILLINOIS Renter's liability limited to \$200. Collision damage waiver (CDW) virtually eliminated. Mandatory charges included in rate.

CALIFORNIA Cost of CDW option cannot exceed \$9 a day. Mandatory charges folded into advertised rate.

NEW YORK CDW option banned. Individual's insurer must provide coverage for rentals in U.S. Mandatory charges included in rate.

COLORADO Passed law Apr. 12 requiring rental companies to tell customers they may not need CDW. Optional CDW still permitted.

FLORIDA Bill in the House caps price of CDW option at an average of \$2.40 a day, with very small agencies exempted from the cap. Mandatory charges included in advertised rate.

DATA: STATE GOVERNMENTS

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customers and insurers for car repairs. Alamo has had its embarrassments, too. Its over-the-phone rental practices are the subject of a class action filed in U.S. District Court in Philadelphia. And the Federal Trade Commission has negotiated a consent decree with Alamo after charging that the company was too sporadic in telling customers who reserved by phone that they had to pay a mandatory fuel fee.

Despite its action against Alamo, the FTC strongly supports keeping the CDW as an option. Their reasoning: About 60% of car renters don't need to take the CDW, since they are already covered by their employers, their own auto insurance, or by credit cards such as American Express. By banning the CDW and lumping the costs of protection into the rental rate, the FTC argues, most renters will end up paying for protection they don't need.

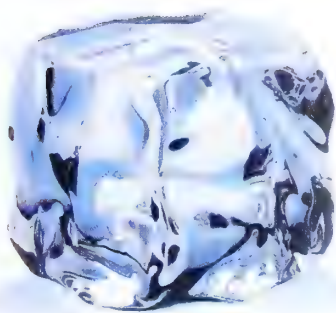
Plenty of legislators, as well as the National Association of Attorneys General, disagree with the FTC—and the debate, prodded along by the car rental companies, has been lively. In Illinois last year, Alamo hired lobbyists costing at least \$350 an hour to make a futile last-minute effort to halt a bill that virtually did away with the sale of CDW options. The Colorado legislature recently ended up keeping the CDW—thanks to heavy lobbying by the smaller agencies.

FEWER COME-ONS. The fiercest battle is in Florida, Alamo's home state and the source of 10% of the rental market. More than 40 lobbyists, including 16 from Alamo and 14 from Hertz, are pressing their case in Tallahassee. Some sort of bill will probably be passed before June.

As legislators in Florida and other states toil over their bills, they will look closely at what has happened in Illinois and New York, where the CDW is for the most part gone. In Illinois, Hertz and Budget Rent a Car Corp. say that since the CDW was banned, they have raised their rates around 8%. Weekend rental rates in Hertz's Chicago locations have gone up about 12%. Hertz, Avis, and Budget say they need higher prices to cover the costs of insurance, capital improvements, and interest payments.

The net result of this battle most likely will be more explicit but less enticing marketing for car rentals. Already, Alamo is planning to make its fuel fee optional. And newspaper ads for car rentals are explaining extra costs more clearly in bigger type. So in the end, car renters will probably find their bills easier to figure out—but no cheaper.

By Antonio N. Fins in Miami and Christopher Power in New York, with Seth Payne in Washington and bureau reports



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THE BIG SPILL'S BIG CHILL

The few hopes domestic drillers had left are now nearly dashed

What does it take to make a profit in the oil patch these days? For driller Rowan Cos., it took a disaster. Last December the company's 300-foot drilling rig sank into the North Sea. It was insured for the replacement cost of a new one—and the proceeds gave the Houston company its first quarterly profit since 1985. "If you're a poor dude in the Gulf of Mexico with a 200-foot rig, there's not a prayer," says Rowan Chairman C. R. Palmer.

Rowan is lucky—it's still in business. Four years of plunging oil prices have put the U. S. oil industry on the beach, and drillers and service companies have been hit hardest. The recent rise in oil prices, to \$21 a barrel, is hardly enough to persuade oil companies to step up exploration. As if that wasn't enough, the oil spilled from the Exxon Valdez threatens industry hopes of drilling in new fields, especially in the coastal plain of the Arctic National Wildlife Refuge (ANWR).

Before the Mar. 24 accident, which gushed 240,000 barrels of oil into scenic Prince William Sound, the drive to open the ANWR had been gaining momentum. Just a week earlier, the Senate Energy Committee had approved an exploration and drilling plan. The House's chief drilling sponsor had introduced his ANWR development bill just one day before the spill.

Now, House Merchant Marine & Fisheries Committee Chairman Walter B. Jones (D-N. C.) has put the bill on the back burner. Alaska Republican Senator Frank H. Murkowski, a major supporter of oil development in the state, wants the Interior Dept. to halt permits for drilling in Alaska's Bristol Bay. And, even before the spill, environmental pressure was mounting in other areas. As a candidate, George Bush promised voters that he would set up a Presidential task force to review

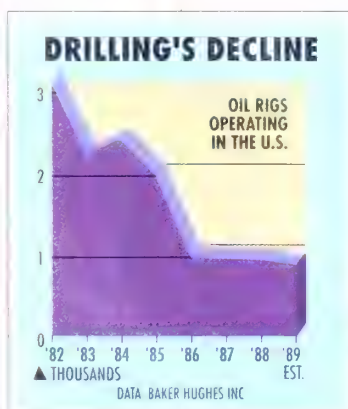
drilling off California and Florida. "The balance of power has clearly shifted from energy to the environment," says Daniel Yergin, president of Cambridge Energy Research Associates, an industry consultant.

Even before the spill, cheap oil was reshaping the industry in the U. S. Wildcatters have gone the way of \$30-a-barrel crude. And most of Big Oil's exploration dollars are now going to remote areas far outside the U. S., where prospects for big discoveries are better. Stateside, oil companies are paying far more attention to their lucrative refining and chemicals businesses. "I sort of feel like I'm the poor side of the family now," says Leonard M. Rickards, Phillips Petroleum Co.'s executive vice-president for exploration and production.

LOW TIDE. Most drillers would agree. Only 758 rigs are now operating in the U. S., down 16% from just a year ago. Since 1982 the number of dues-paying members in the International Association of Drilling Contractors has fallen by more than half, to 475. Meanwhile, about 40% of the nation's 20,000 independents have disappeared—including 46 of 62 big public companies.

The end isn't in sight. Abilene, Tex., which once played host to 300 rigs, has lost some 36 drillers—three in the past two months. Pyramid Drilling Co. recently shut down after 10 years in the business, idling all six of its money-losing rigs. Only seven drillers remain, and they are barely hanging on with just 50 rigs. "Drilling in North America is at the lowest level since we started counting rigs," notes Theodore R. Eck, chief economist for Amoco Corp. (chart).

Not coincidentally, companies—and reserves—are changing hands at a furious pace. According to First Boston Corp., there were 84 deals last year, valued at \$32 billion. Up sixfold from 1987, the



AUCTIONING EQUIPMENT IN ODESSA, TEX.: DRILLERS AND RIG BUILDERS ABANDONED THE INDUSTRY IN DR...



turnover was led by the \$7 billion sale of Tenneco Inc.'s gas and oil properties. At the same time the industry spent just \$29 billion on domestic oil and gas exploration, replacing only 53% of their production, according to Energy Performance Review, an industry research company.

Financing for oil and gas drilling is drying up, too. Investments in oil and gas partnerships peaked in 1982, when public offerings raised \$2.1 billion, according to Robert A. Stanger & Co. Then came the plunge. Last year public investment was down to a mere \$89 million—just 4% of the 1982 high. "What we have," says George Gaspar, first vice-president of Robert W. Baird & Co., "is a massive reshuffling of the deck."

Dallas-based Sabine Corp. is a good example. Once an industry star, it cut expenses, sold assets, and reorganized, paring losses by two-thirds, to \$7.5 million on 1987 sales of \$68 million. Despite that—and rich gas reserves—its stock languished at 12. When a raider came after it, Sabine found a white knight in Pacific Resources Inc. at \$24 a share, or \$230 million. Thus ended Sabine's 5 years of independence.

In Houston, Transco Exploration Co. a five-year-old limited partnership owned by Transco Energy Co., is being liquidated. At today's gas prices, it can't afford



pay dividends and still explore. Says H. Lollar, president of Transco Exploration: "The market's a disaster."

Left with scant funds and fewer prospects, the handful of drillers and service companies that can afford to are following the majors overseas to North Yemen, Colombia, Brazil, Malaysia, and India, where finding costs are lower and tax incentives are offered. "We wish we didn't even have U.S. operations," says Robert L. Parker Jr., chief operating officer of Tulsa-based Parker Drilling Co., who notes that more than 65% of the company's business is now overseas.

HARD MOVEMENTS. Both at home and abroad, companies are becoming more selective about where they drill. That's the reason costs are coming down and fewer attempts are coming up dry. At Phillips Petroleum, for example, the number of dry holes dropped to 45% last year from their long-term average of 65%. And Texaco Inc. reports that its overall finding costs have declined from \$3.06 a barrel in 1986 to \$3.33 last year. Robert Mosbacher Jr., president of Mosbacher Energy Co., notes that his company is "only drilling high-grade prospects—nothing else." In 1982, Mosbacher had five rigs in the expensive-to-drill Rocky Mountain area. Now the company has none. "The whole herd's killed out of the Rockies," says Mos-

bacher, the son of the new Commerce Secretary.

Oil is getting scarce in the U.S. With the exception of Alaska, the U.S. is the most mature oil-producing area in the world. Gas is another story, however. At an Arthur Andersen & Co. energy conference last December, 82% of the oil industry executives polled saw potential for major new reserves of natural gas within the U.S. They also noted that concern for the environment would have a significant impact on gas demand through the end of the century.

Even so, that's little solace for drillers. While many industry analysts believe that the so-called bubble of surplus gas is shrinking, their predictions that gas prices would rise in the past heating season from the then-current \$1.60 per thousand cubic feet (Mcf) to \$2.50 or \$3 came to naught. Blame cheap oil, which sparked a wave of industrial switching from gas to residual oil, and unseasonably warm weather. With gas prices bumping along at just \$1.60 per Mcf, "it's just not economical to explore for gas today," says T. Boone Pickens Jr., chairman of Mesa Limited Partnership.

Banking on higher prices, companies have been snapping up gas reserves. Pickens has bought \$1.7 billion worth of gas properties since 1986, while Amoco, BP America, and Chevron have all been

making significant gas acquisitions. Last year, Amoco spent nearly \$5 billion to acquire Dome Petroleum and some of Tenneco's gas reserves.

Apart from gas, producers see Alaska as their only hope for significant domestic growth. Since the discovery of Prudhoe Bay in 1968, companies have spent billions searching for another "elephant field." Shell Oil Co., for one, has spent \$271 million to obtain 165 drilling tracts in the Chukchi Sea, a frontier field northwest of Alaska that is believed to hold 2 billion barrels. Shell hopes to drill two holes this year. The real plum, however, is the ANWR, which is estimated to contain up to 3.2 billion barrels. But environmental concerns, heightened by the Exxon spill, have put that off limits. Congress may not even take up the issue again until next year.

SPOT SHORTAGES. If either the ANWR opens up or natural gas demand rises, drillers could find some work. In fact, if gas sales do take off, producing enough of the stuff could quickly become a problem. As the bubble shrinks, "deliverability is falling like a rock," says former Energy chief John Sawhill, who now directs the energy practice at McKinsey & Co. "For a while we can increase gas production without drilling," says Amoco's Eck. "But there's no question we've got to do more drilling."

The question is, will enough of an industry be left to do the job? Hundreds of service and producing companies have bitten the dust, and qualified engineers and oil-field workers have slipped away to other businesses. A survey by the Dallas-based Society of Petroleum Engineers shows that only 1,900 students are enrolled in petroleum engineering programs, down 80% from 1983.

Even with the minimal drilling now going on, the industry is facing spot shortages of equipment and people. With companies stripping drill pipe from inactive rigs to avoid buying new supplies, many pipe manufacturers have closed up shop, leaving buyers with a 60-day wait for new pipe. As a result, says Texaco's CEO James W. Kinnear: "It would be difficult to ever get drilling activity back to where it was in 1981."

The days of cheap oil may one day end, leaving the country with an enormous price tag. Oil imports, now nearly equal to U.S. production, already contribute 27% of the trade deficit. That growing tide of imports could revive the concerns about energy security prevalent during the 1970s. But don't expect a groundswell of support from oilmen when the day of reckoning comes. Most will have gone the way of Rowan's rig.

By Todd Vogel and Mark Ivey in Houston and Mimi Bluestone in New York

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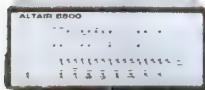
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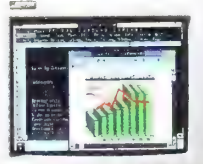
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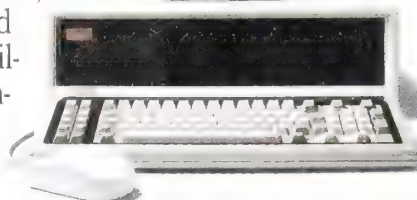
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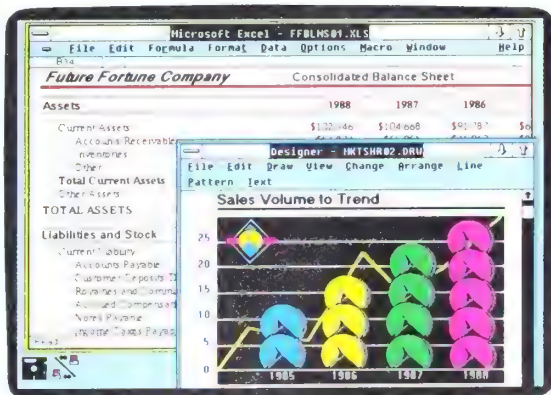
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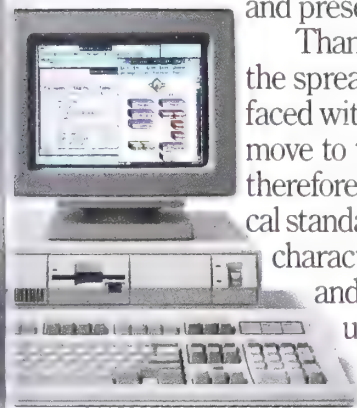
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HAS ALUMINUM CLIMBED OFF ITS ROLLER COASTER?

This time, frantic expansion may not bring a price collapse

Pavlov never studied the aluminum industry, but maybe he should have. For decades, when sales got hot, the industry's response was automatic: Pile on new capacity. Before long, supplies stacked up. Then prices crashed—until the next recovery started the process over again.

Now that the industry is riding the strongest market in a decade, what's happening? A building spree, of course. Reynolds Metals, Alcoa subsidiary Almax, and Canada's Alcan are constructing huge new smelters in Quebec. And Aluminum Co. of America may add capacity in Venezuela. For North American producers, it's the largest planned expansion in a decade for plants that extract aluminum oxide, or alumina, from bauxite ore and smelt it into ingot, from which finished products are made.

So what's new? Maybe this time the industry isn't making the same old mistake. Five years ago, amid warnings that aluminum was a sunset metal, U.S. producers closed 1.2 million tons of high-cost smelting capacity—27% of their total. Then they spent \$4.5 billion on new plants and equipment for making more-profitable fabricated products such as packaging foil and sheet for cans.

Whether by luck or foresight, the strategy worked. When the dollar dropped, aluminum exports shot up: Last year they were 10% of total U.S. shipments of 17.1 billion pounds, up from 6% in 1986. The major producers' return on common equity leaped to 29.5%.

This year the surge hasn't slowed. Profits at Alcoa,

Reynolds, and Alcan rose 63% in the first quarter. And ingot's price is holding at a lucrative 96¢ a pound. Smelters worldwide are running at 98% of capacity, and until plants open in the early 1990s, says William O. Bourke, chairman of Reynolds Metals Co., "we'll be gunning our equipment to the outer edge of performance just to meet demand."

A worldwide recession would dull alu-

minum's prospects, of course. But domestic producers don't see signs of one yet. Their order books are full in the U.S., where one-third of the world's aluminum is sold. Shipments to the \$4.5 billion domestic beverage can market, which normally is recession-resistant, are growing 6% annually—double the forecast of two years ago. Commercial plane makers, who use special aluminum

alloys that carry 20% pretax margin have backlogs stretching to 1995. The biggest question mark is the U.S. auto industry. Car sales in the first quarter were off 10.8%. But aluminum even has a hedge against that. Over the past five years the metal has grabbed a third of the domestic auto-wheel market from steel. By 1992, aluminum makers expect the use of their product in the average U.S. car to grow by 25%, to 200 pounds. But then some foreign cars may contain up to 400 pounds of the metal. Ferrari and Jaguar have designed prototype sports cars with aluminum frames for better fuel economy. And Honda Motor Co. has an aluminum-intensive car scheduled for limited production in 1991.

QUALITY COUP. Indeed, much of the new demand is from foreign markets. Reynolds' Bourke thinks U.S. aluminum exports will rise 12% to 1.9 billion pounds this year. In 1988 half of those exports were primary metal, as ingot is called. But higher-margin semifabricated exports were up a third. Strong demand and the weak dollar were the main reasons, but better product quality is also winning sales for U.S. producers.

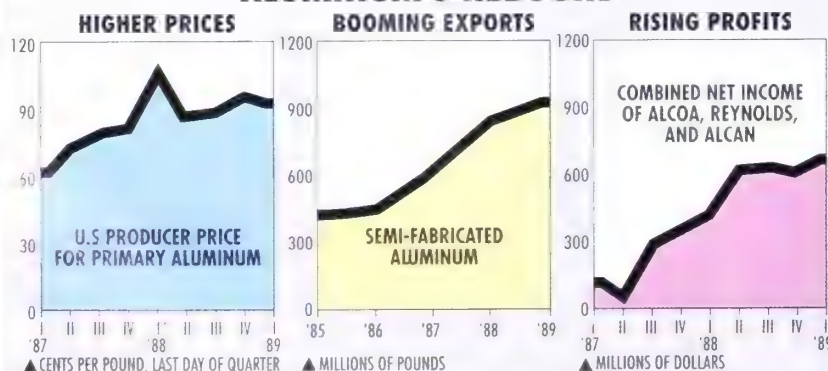
Even the picky Japanese are buying. In the early 1980s, thanks to the cheap yen, they snatched 10% of the U.S. aluminum can sheet market with less expensive, superior-quality products. But the tables have turned. Smelters use huge amounts of energy. By the mid-1980s it had become unprofitable for Japanese producers to compete with cheap-energy smelters in Canada and South America, and the Japanese had closed most of their 1.6 million tons of capacity. Then aluminum use in Japan took off, as demand for cans started growing by 25% a year. In 1988 the Japanese began importing sheet from Alcoa, which controls 43% of the U.S. market. Alcoa now lands can sheet in Japan for about \$1.23 a pound, 5% less than it costs the Japanese to make it, and has just under 10% of the Japanese can sheet market.

This may be just the beginning. "The market has exploded for aluminum cans in

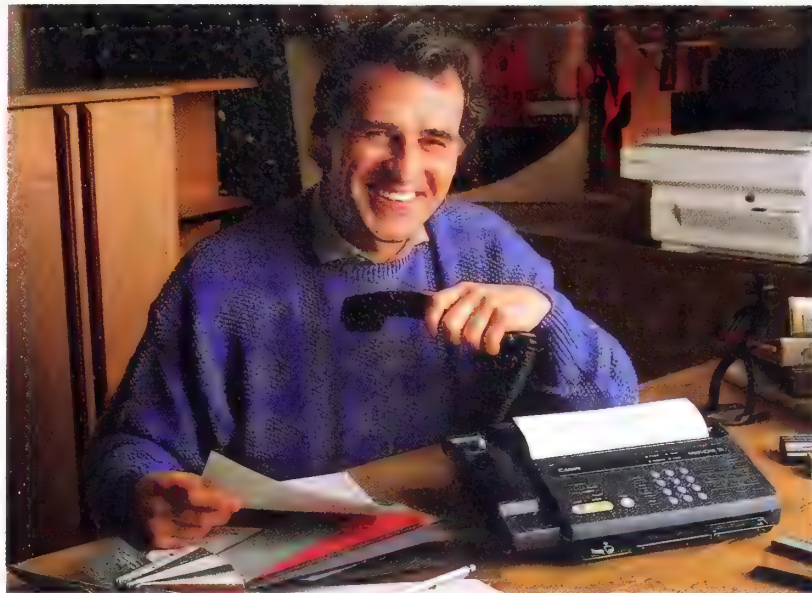


EXPORT BOUND: ALCOA NOW HOLDS 10% OF JAPAN'S CAN SHEET MARKET

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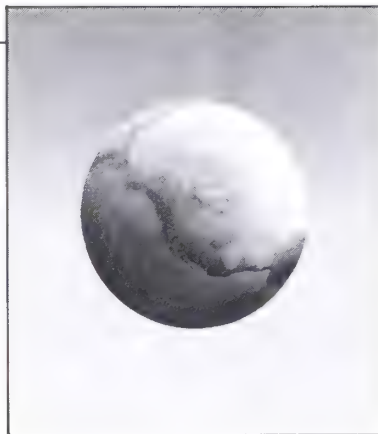
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This is where insurance steps in to do what it has always done for society: control risk by limiting its consequences. In doing so, insurance unleashes the power of business to innovate and grow and frees individuals from the specter of losses they could not bear alone.

Yet insurance remains complex and a mystery to many. The most common misperception is that it is an absorber of losses—an unlimited treasury that can pay for all the ills that befall individuals and society in general. Not true. Insurance cannot and does not work that way.

What Is Insurance?

What, then, is insurance and how does it work? Reduced to its essentials, insurance can be



expressed in one basic concept: risk sharing.

Insurance permits the risk borne by a single business, institution or individual to be distributed across a large universe of policyholders. This process is activated through the payment

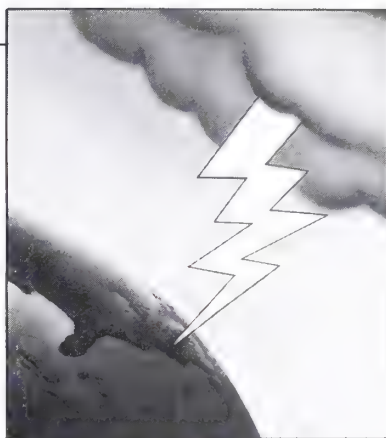
of premiums, which are aggregated by an insurance company to pay the losses sustained by the policyholders, as well as the expense of administering the risk-sharing process.

This direct, inexorable relationship between premiums and claims is the foundation of risk sharing—and insurance. It means many policyholders can pay relatively small amounts so no one suffers a devastating loss. But it also means that whatever forces affect claims must also affect premiums.

It then follows that if claims are excessive, premiums must inevitably increase. Otherwise, premiums will not be sufficient to cover future losses and the risk-sharing process will be thrown out of balance.

It's true that insurers generate investment

there must be a way to share the inevitable risks.



come from the premiums they collect, but the uncertainties of the financial markets mean that you cannot count on that income to offset underwriting losses.

Another economic truth: If factors outside the risk-sharing process change the rules governing the payment of losses, the impact subsequently will be reflected in policy-holder costs. When, for example, the courts expand the concept of liability and juries award damages that exceed the extent of the injuries sustained, the result is higher premiums.

In the same vein, when any factor—inflation, public policy, the civil justice system—makes it

impossible to accurately predict claims losses, the risk-sharing function is impaired. Risks can be shared only when you can categorize them, reasonably predict their frequency and severity and then set rates that are adequate to pay for the

projected losses.

The Power of Insurance

Risk sharing, in short, gives insurance the power to support progress across the entire spectrum of economic, social and human endeavor. Consequently, insurance should not be viewed

as an absorber of losses—as a treasury that can be tapped endlessly with no further consequences. Someone must always pay. When claims rise, so must premiums.

This reality takes on added significance in today's global environment. As the velocity of events accelerates, we must have an efficient mechanism to deal with the uncertainties that always accompany change and opportunity.

Insurance based on risk sharing answers that imperative.

We are interested in your thoughts. Please direct them to: M.R. Greenberg, President and Chief Executive Officer, American International Group, Inc., 70 Pine St., NY, NY 10270.

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Industries

the whole Pacific Rim," says Ronald R. Hoffman, group vice-president for packing at Alcoa, which got 25% of its \$9.7 billion in revenues last year from can and sheet sales. He thinks that by 1991 the minimum can market abroad could grow by 25%, to 80 billion cans. And that may be conservative. China already has the can lines to support its expanding export business. In aluminum use, the rest of the world is where the U.S. is 15 years ago," says J. Clarence Morrison, of Dean Witter Reynolds Inc. **OPENING SPREE.** That has U.S. producers expanding overseas, notably in Europe in anticipation of 1992's open market. Alumax Inc., a leader in finished architectural aluminum products, may spend \$100 million in the next two years to buy facilities to add to its current fleet of 10 plants there. Reynolds is adding fabricating capacity in Spain and expects to double its \$620 million annual sales throughout Europe by 1992. Despite their good fortune, U.S. producers are trying to avoid getting starved. Shipments to construction mar-

American producers are gearing up for an overseas aluminum can market that could grow 25% by 1991

ts—some 19% of aluminum's normal U.S. business—slowed 9% in 1988. And minimum makers are watching auto sales. Still, the industry is reasonably well prepared to withstand a recession. Since 1984, producers have lowered manufacturing costs for ingot by 25%, to about 50¢ a pound. Thus even if overall shipments dropped by 15% and ingot's price fell to 75¢ a pound, the earnings of the three top U.S. aluminum companies would exceed 1987's \$563 million, says William G. Siedenburgh, an analyst at Smith Barney, Harris Upham & Co. Ironically, the industry's biggest fear is that tight supplies will push prices too high. At 96¢ a pound for ingot, says Walter W. Merner, president of broker/analyst Merner Research, some users may switch to cheaper materials. Right now, however, demand is staying in balance with supplies. That means the threat of "big [price] swings has been removed" for the immediate future, says Reynolds' Bourke. The result may be slower profit growth. But aluminum makers will take stability anywhere over the volatility that has buffeted them in the past.

By Michael Schroeder in Pittsburgh



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Commentary/by Karen Pennar

WHY ISN'T THE WEALTH TRICKLING DOWN?

Ye have the poor always with you.
—Matthew 26:11

They may indeed always be with us. But must there be so many? Today, six and a half years into the longest peacetime economic expansion, it's an especially wrenching question. Economic growth and the employment it brings have always been critical to lifting people out of poverty. Yet the current expansion has nudged the poverty rate down ever so haltingly. It remains well above the historic low of 1973, when only 11.1% of the population was counted as poor. A quarter of a century after Lyndon Baines Johnson declared it, the War on Poverty is at a stalemate.

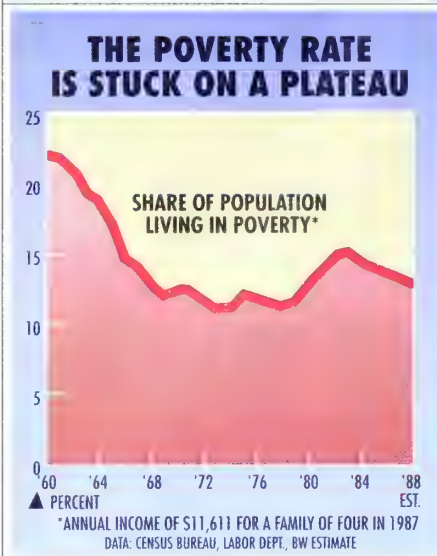
Approximately 30 million people, or about 13% of the population, will probably be counted among the poor when the Census Bureau releases its 1988 data later this year. That's a relatively optimistic projection. In 1987, 32.5 million Americans, or 13.5% of the population, were living in poverty. (The poverty threshold was defined as income of \$11,611 for a family of four.) That year was one of strong growth: Real gross national product climbed 3.4%, and the unemployment rate fell to 6.2%, from 7% in 1986. Yet the poverty rate dropped by a mere tenth of a percentage point. Why are these gains so piddling, while in the 1960s, during the early years of the battle, the ranks of the poor were halved?

The evisceration of antipoverty and job-training programs during the Reagan Administration surely has made a difference. But to economists who count on growth to put a dent in poverty, that doesn't explain the slow progress of the 1980s. Two other factors better explain the difference between the 1980s and the 1960s: First, the nature of growth in this decade is very different from what it was when the War on Poverty was launched. Second, the nature of the poor themselves has changed.

NO HOSANNAS. By now vital statistics on the economy's performance in the 1980s should be familiar: Some 17 million new jobs have been created, and unemployment is at a 15-year low of 5%. But the hosannas you've heard are misplaced. Compared with the 1960s,

the economy's performance is hardly so stellar. The unemployment rate fell from 6.7% in 1961 to 3.5% in 1969. With a much smaller population, more than 12 million jobs were created. And growth in real output averaged 4.5% per year, compared with 3.2% per year in the 1980s.

The gains in productivity and real wages were even more important, observes Nobel laureate James Tobin of Yale University. Moving in lockstep, they helped pull millions of people out of the ranks of the impoverished. In



the 1960s output per hour in the non-farm business sector grew at a 2.6% annual rate, as did real compensation per hour. In the 1970s both productivity and real wage growth slid, and now the numbers are still worse. In the 1980s output per hour has crept up at a 1% annual rate, while real compensation per hour has inched up a mere 0.4% per year. No single set of statistics better demonstrates the gauzy quality of growth in the 1980s. More people work more jobs because they have to. "Stagnation in wages is re-

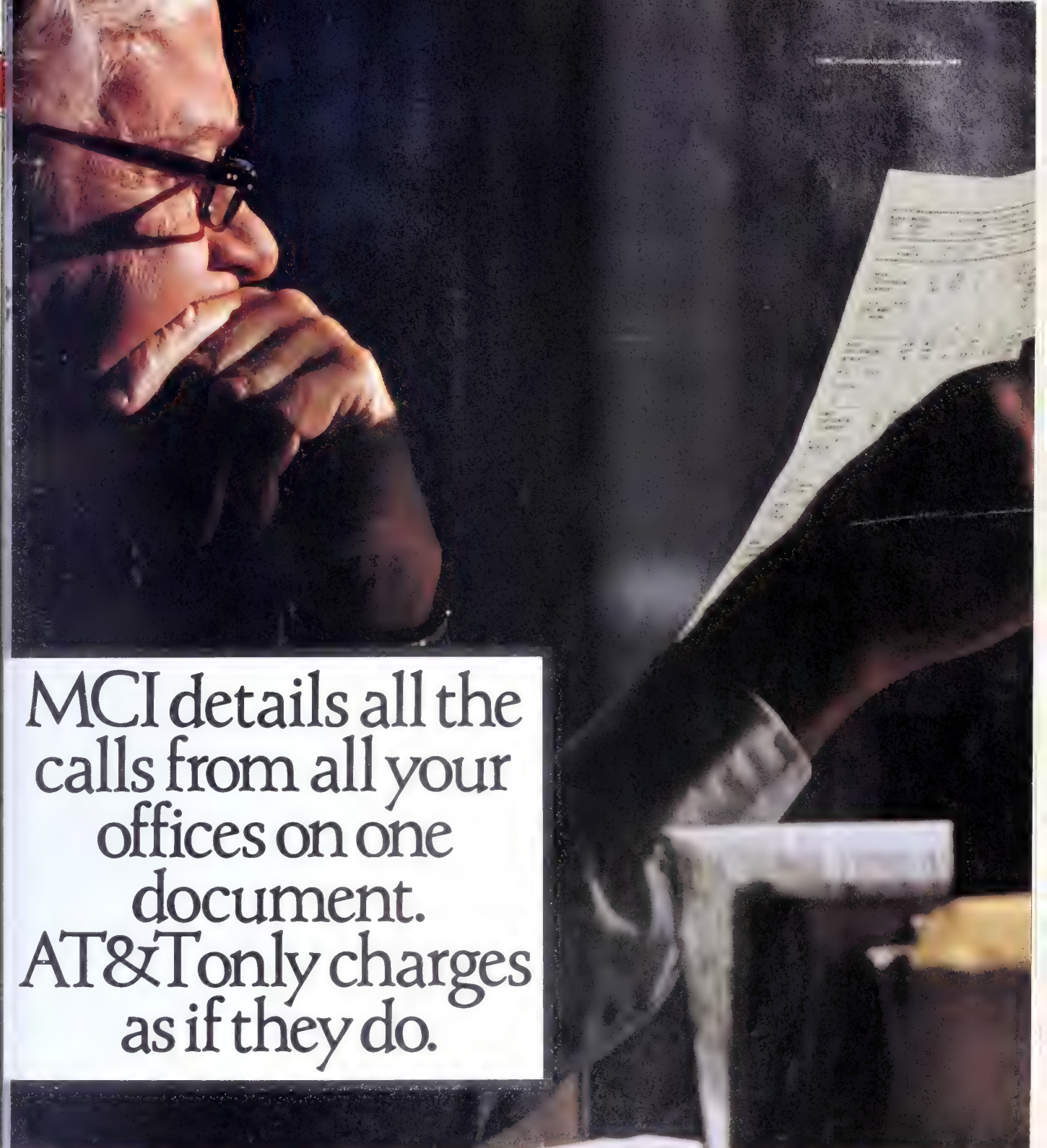
Some of the gains of the 1980s are illusory—and there are more hard-core poor who are harder to help

sponsible for employment growth," says Lawrence H. Summers, an economist at Harvard University. A "quiet depression in living standards" is preventing further gains against poverty.

This, then, is the underside of the current expansion. Yet even if growth were stronger, productivity gains more robust, and real income gains healthier, something else has changed since the 1960s. Today, many experts are convinced, there is a larger group of the chronic, hard-core poor—a group that is almost certain to remain untouched by any changes in macroeconomic policy.

TOUGH NEIGHBORHOODS. Working with 1980 census data, the Urban Institute in Washington estimates that 880 neighborhoods around the country have a high incidence of "dysfunctional" behavior, from high dropout rates to teenage pregnancy to welfare dependency. Although only 1 million of the residents of those neighborhoods were officially classified as poor in 1980, approximately 2.5 million people lived in the neighborhoods, and "all of them were at risk of being pulled into the underclass," says Urban Institute economist Isabel V. Sawhill. From 1970 to 1980, she notes, the size of the group tripled—and it's a safe bet that the 1990 census data won't show any shrinkage in the underclass. "We didn't have this kind of social pathology in the 1960s," says Tobin. "Poverty seemed more amenable to economic solutions."

Indeed it did. Yet today it is not only the underclass, a minority of the poor, who seem to be left behind, but also the working poor, who still constitute the overwhelming majority of the impoverished. Shrinking the underclass requires social solutions the experts can't always agree on. Almost everyone agrees, though, that economic solutions help the working poor. For them, real wages will have to rise faster, which means productivity will have to improve. And for that to happen, savings and investment must rise. It's an old saw by now that this is how America will become more competitive. By the same token, this is how America can lift more people out of poverty. It worked in the 1960s. The trick is to make it work in the 1990s.



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DOW JONES: STILL SLUGGISH, STILL OPTIMISTIC

It hasn't stopped the slide in its business publications

The executives of Dow Jones & Co. seemed confident when they addressed Wall Street's media analysts in December. Barring a recession, they said, the coming year would bring improvements across the board for the company. It was welcome news: The October, 1987, stock market crash had exacerbated decline in ad sales and profits at the company's business publications—*The Wall Street Journal* and *Barron's*.

Well, there's no recession yet—nor is there evidence of a turnaround at Dow Jones. In March, ad sales declined for the 19th straight month. For the first quarter of 1989, operating income at the business publications fell 33.1% compared with the same period last year. Profits fell 13.6% at the company's chain of 23 community newspapers. And its computerized information services aren't picking up the slack: The division's profit grew a scant 0.6% in the first quarter. Even more ominous are signs of sluggishness at the biggest contributor to profits—Telerate Inc. Dow Jones owns 67% of the company, which provides data about the financial markets. All in all, Dow Jones will have to push hard to top 1988's operating earnings of \$352 million on sales of \$1.6 billion.

ROOM TO GROW? Dow Jones executives are already trimming their forecasts. They say ad lineage will be flat this year, after projecting in December that sales could increase as much as 4%. In January, Telerate executives said Wall Street analysts were correct to reduce their 1989 earnings projections to about \$1 a share from approximately \$1.19.

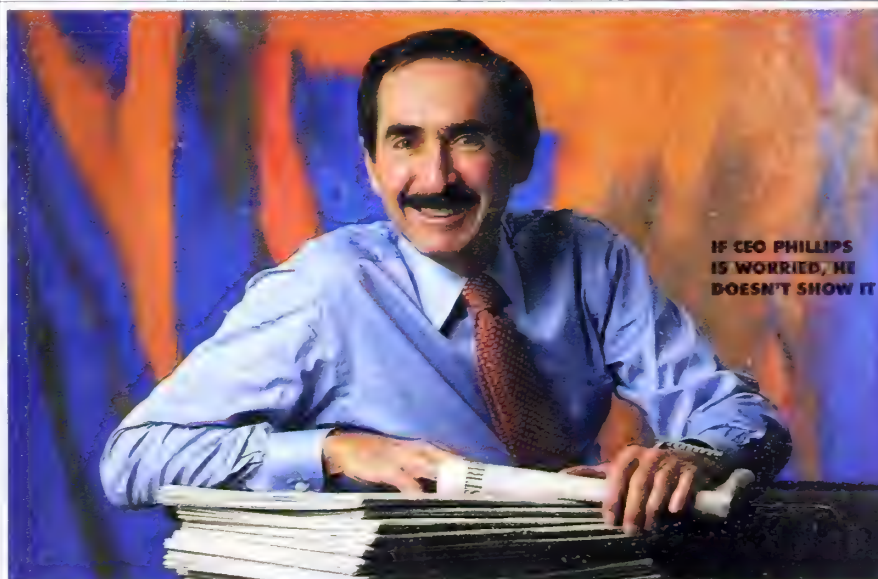
If Chief Executive Warren H. Phillips is worried, he doesn't show it. "We've been on roller coasters before, and we've seen the way comebacks were made," he says. As he sees it, the company is making changes that will ensure long-term growth. He brought the *Journal* up to date, on the eve of its 1989 centennial celebration, by giving it an editorial facelift, including an expansion to three sections from two. Dow Jones also took more complete control of Telerate. To help pay for these moves, Dow Jones sold its Richard D. Irwin Inc. textbook division for \$135 million, and unloaded

its 17% stake in Continental Cablevision Inc. for an additional \$300 million.

Phillips sees plenty of room to grow at all of his operations and dismisses as "garbage" the widely held view that the *Journal* and *Barron's* have reached maturity. Advertisers, he says, will jump at the opportunity to reach targeted audiences through the 12 regional editions the *Journal* is phasing in—including one

a peak of 2.11 million in 1983—part because of the decline in management ranks at many corporations. *Barron's* circulation fell 13.4%, to 246,500, last year. The papers' problems predate the stock market crash: Together, their operating profits have declined since 1983.

In part, that's because the business news market has become saturated with new, and more sophisticated, competitors. In newspapers, Dow Jones has to contend with the *Financial Times*, *Investor's Daily*, *USA Today*, and the national edition of *The New York Times*. Business magazines have also made inroads in both advertising and circulation. And investors who can't wait for press to roll have computers spitting out data or can tune into special cable channels such as Financial News Network Inc. and NBC's just-launched Consumer News & Business Channel.



IF CEO PHILLIPS IS WORRIED, HE DOESN'T SHOW IT

WARNING SIGNS AT DOW JONES

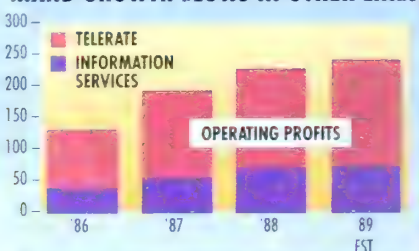
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launched on Mar. 27 for New York City. And he expects more readers as baby boomers enter the ranks of managers who read the *Journal* and *Barron's*.

The numbers have yet to support his case. Both papers continue to lose ground. The *Journal's* paid circulation slipped 8%, to 1.95 million last year, from

Dow Jones seems to have reconciled itself to a stable audience by designing a marketing strategy that emphasizes the high incomes of its readers. In the face of falling circulation, it raised subscription rates for its business publications this year and began charging advertisers an additional 6.5%. A full-page ad

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national edition of the *Journal* can cost more than \$95,500. "We want to protect the quality of our audience instead of numbers," says Kenneth L. Benga, Dow Jones's general manager. With its business publications stalled, Dow Jones is depending heavily on Telerate's performance. Dow Jones derives 38% of its operating profits from the \$156 million contributed by Telerate in 1988—the first full year it was carried in Dow Jones's books. But there's reason for concern. These are difficult times for some of Telerate's main customers: Treasury bond dealers face a shrinking market. Savings and loans account for about 10% of Telerate's sales.

VICE TO TRADERS. To resume its skyrocketing growth, Telerate is spending heavily to break into a new business: transaction services. In this brave new world, foreign exchange traders can use computers to negotiate with several potential partners, each dealing in different currencies, simultaneously. Telerate is about to enter the field with a product called Trading Service, which it developed jointly with American Telephone & Telegraph Co. It is a huge market: The daily spot volume in foreign exchange is more than \$300 billion. Telerate may also offer its service to investors in Eurodeposits and government securities.

Sounds promising. But Telerate is trying to crack a near-monopoly that its rival, Reuters Holdings PLC, has in the foreign exchange market. And Reuters expects to maintain its control by upgrading a similar system of its own, called Dealing 2000. Reuters claims its product will provide information and alert traders to complete transactions instantly—while users of Trading Service still have to go through additional steps to close their deals. John S. Hull, executive vice-president of Reuters America, says Telerate will be lucky to survive 15% this year after it absorbs the startup and sales costs.

Hull declines to offer his own projections but says he's confident that Telerate will dominate. "We think we're much more competitive with Reuters than they are with us," he says. Indeed, Hull claims the Dealing 2000 upgrade will run into trouble in tests. "They've been led back. We think we're taking the lead." Reuters denies any problems.

There's still time for Dow Jones to make the turnaround predicted for 1989. Telerate may yet grab a piece of Reuters' turf, and the *Journal* may win additional readers and advertisers. But when the economy expected to slow, the roller coaster may go down some more or it levels off.

By David Lieberman in New York

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DOES JUNK HAVE LASTING VALUE? PROBABLY

But investors beware: The rate of defaults could climb

Michael R. Milken and his apostles at Drexel Burnham Lambert Inc. attracted a mighty flock by preaching the gospel of junk bonds: Default rates are low, and higher yields more than make up for greater credit risk. The junk, or high-yield, market has grown to \$200 billion, and big new issues are still being planned. But Milken is under federal indictment for securities law violations. The case he makes for low default rates has come

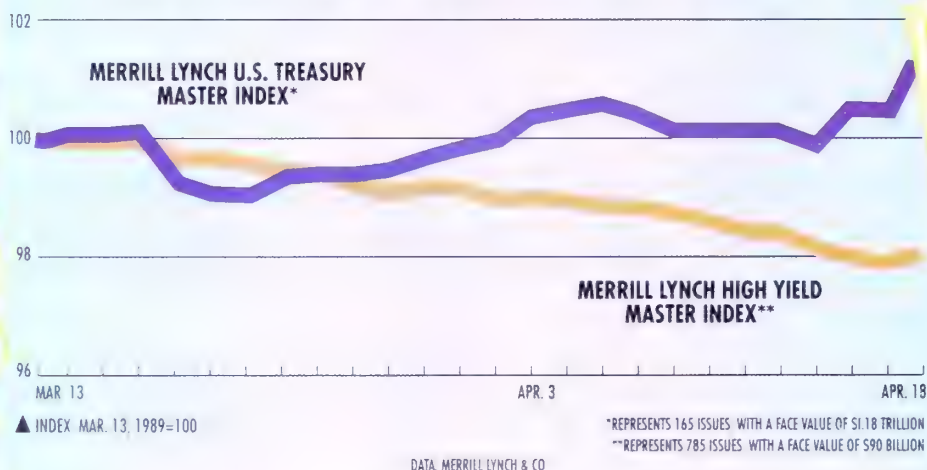
1987. Each time, junk bonds bounced back. The total return—interest plus appreciation—on junk has, in fact, beaten investment-grade issues over the past five quarters.

When the junk-bond market totters, however, it tests the players' mettle. Take the setback on Apr. 13. "There are a dozen big issues that everybody watches," explains Prescott B. Crocker, portfolio manager of the Colonial High Yield Securities Trust. "When you see

Still, junk bonds face some formidable hurdles in coming months:

■ **Milken's departure.** The junk-bond king's exit from Drexel was no surprise, but the market is still smarting. The latest plunge came on the heels of the "Predators' Ball," Drexel's annual bond conference. "People usually come back from that all fired up and wanting to buy," says James Caywood, president of Caywood Christian Capital Management. "This year, no one's in the mood." Other

JUNK BONDS SLIP AS TREASURIES SHOW STRENGTH



under attack from Harvard, no less. And most disturbing, junk-bond prices have slipped even as Treasury bonds gained strength (chart).

But don't write off the junkers yet. They've found a home in the pension fund portfolios of some of the largest companies in the country. Individual investors own about \$60 billion worth, largely through mutual funds. And if default rates are greater than originally thought, the higher yields of junk bonds still pay investors well for bearing greater risks.

'A BAD DAY.' The junk-bond market has suffered serious price shocks before: after arbitrageur Ivan F. Boesky's stunning guilty plea on insider trading charges in November, 1986, and following the stock market crash in October,

some of those down more than a point [\$10 per \$1,000 of face value], you know it's a bad day." Among the benchmarks are bonds of American Standard, Colt Industries, First Brands, and Harcourt Brace Jovanovich.

But the heavy damage was confined to those closely watched, more active bonds. The Merrill Lynch High Yield Master Index, made up of 785 bonds with a total face value of \$90 billion—and a current yield of 13.7%—told a far different story. It fell only a quarter point on Apr. 13. That's \$2.50 per \$1,000 of face value. Many of the junk mutual funds were barely nicked, giving up just pennies in net asset value. That's hardly a massacre and supports another tenet of the junk-bond gospel: There's safety in diversification.

ers worry that more people, such as David Solomon, whose Solomon Asset Management manages junk bonds for pension funds, will be pulled into the Milken investigation. Solomon is cooperating with the government in its case against Milken and is leaving the firm.

■ **Supply and demand.** The calendar of junk underwritings in the next two months is about \$9 billion, about half of it earmarked for the leveraged buyout of RJR Nabisco Inc. And every big take over announced in the stock market, like Marvin Davis' bid for Northwest Airlines Inc., swells the potential supply.

Demand is weak. High-yield mutual funds, which attracted huge money inflows in 1988, are no longer brimming with cash. And in the wake of the thrift crisis, savings and loans are not adding

THE AIRLINE RALLY WOWS WALL STREET

Despite the runup, the stocks may still be cheap

Even though the stock market has shown vigor of late, the rallies on Apr. 18 and 19 surprised even the most ardent bulls. The Dow Jones industrial average soared close to 2400, its highest level since the crash, and the transportation average climbed to an all-time high. Will the good times continue?

Well, the answer seems to be "yes" for the transportation stocks, whose rally is spearheaded by a surge in airline stocks that is probably not over, and a "maybe" for the market as a whole. The cause of the broad advance was a 0.5% rise in the consumer price

and that's likely to continue. The recent wave of restructuring began in February, when Pan Am Corp. Chairman Thomas G. Plaskett announced that the company would seek a merger partner. That, and Eastern's troubles, caused Pan Am shares to nearly double since New Year's Eve. Then came the \$90-a-share bid for NWA Inc. by investor Marvin Davis. NWA shares have soared some 45% since early March as Davis pressed forward with his offer, and management weighed a restructuring or even a sale of the company. Raiders like Davis and other investment pros are increasingly viewing airline

stocks as attractive values. "These companies are very cheap on a fundamental basis," asserts John Lattanzio, head trader of Steinhardt Partners, an influential money manager that is heavily invested in airline stocks.

VERY BULLISH. Even in the event of a "worst-case" scenario—the total resuscitation of Eastern—competing carriers still seem underpriced. Delta, long viewed as a candidate for an LBO, sells for slightly over book value, vs. a 1.9 price-to-book ratio for the overall market. Likewise, AMR Corp. is trading at a bit under book value. Both companies have favorable ratios of price-to-cash flow, notes Karen Firestone, manag-

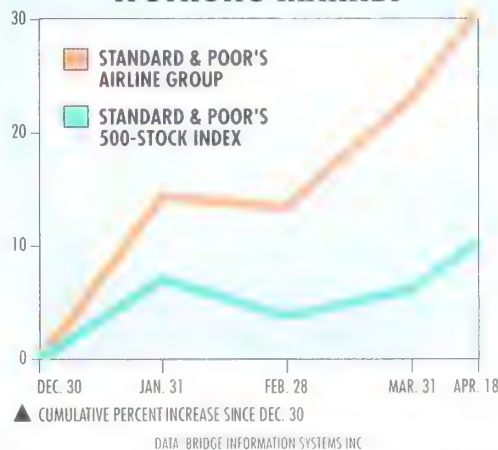
er of the Fidelity Select Air Transportation Fund.

The airline rally will come to naught if oil prices substantially increase or if the economy falls into a recession that cuts air travel. But the bulls are standing fast. Lattanzio, for one, feels that oil prices will decline by the summer and that fears of recession are overblown. The Steinhardt folks are putting their clients' money where their opinions are by snapping up a 5.21% stake in USAir Group Inc., for \$88.1 million.

So long as heavyweight investors like Steinhardt keep buying, the airlines are likely to remain aloft. And that could well give the market continued doses of adrenaline.

By Gary Weiss in New York

AIRLINES LEAD A STRONG MARKET



index, which was low enough to convince traders that a resurgence in inflation was not in the cards. The market's growing health may be checked if upcoming economic numbers are not so cheery. But the airline stocks are likely to linger in the stratosphere.

The group's surge has been largely fueled by expectations of revenue and market-share gains at the expense of strife-torn Eastern Air Lines Inc. The Eastern work stoppage has idled 7% of the industry's capacity and has particularly benefited Eastern's other major East Coast competitor, Delta Air Lines Inc., as well as USAir and AMR, the parent of American Airlines. But that's not the whole story by a long shot.

Merger and leveraged-buyout speculation has also sustained airline stocks,

more lower-quality assets. Investors even wary about RJR, whose type of ble, brand-name businesses would ally be the darling of junk-bond buyers. "First I want to see some assets, and what kind of prices they sh," says Caywood.

he economy. A recession, which ild send T-bonds soaring, could be news for junk. Some issuers will not bt default, and many others will suffer a downgrading of credit quality—loss of value. Junk bonds of department store chains, whose fortunes ded on consumer spending, are already ing the pinch. Prices from some Al-Stores Corp. and Federated Department Stores Inc. issues have sunk so low t they're pushing yields to 20%.

urther contributing to credit cons is a widely publicized new study Paul Asquith, an associate professor the Harvard business school, that ws default rates as high as 34%. The ing was jarring because the conventional wisdom holds that defaults are ut 2.5% of all junk bonds outstanding—a figure calculated by New York iversity professor Edward I. Altman. ut the research results aren't necessarily inconsistent. They look at different things. Asquith started with bonds ed in 1977 and 1978 and followed n through 1988. He found that de-ts are rare in early years, then accelerate. By 1988, 34% of the bonds were in ault. And bonds issued in the early s followed the same pattern. Altman ved at his 2.5% figure by measuring percentage of bonds that default h year out of the total junk market, matter what the age of the bonds.

LL ATTRACTIVE. Altman last year conted a "mortality" study similar to Ash's and came up with essentially the e results. Asquith's 10-year-olds d make up a very small part of the l junk market. So even a high individual default rate on those older bonds little impact on the total rate of de-t in a diversified portfolio of junk ds. But Asquith's findings on the tality of individual bonds suggests t as the entire junk universe begins ge, the annual defaults as a percent-of the total market could well rise. till, junk bonds appear to be an at-ctive investment. But investors uld be mindful that the number of bonds may climb. Take for example -rated junk bonds issued at three per-age points over T-bonds. Altman s that even allowing for defaults, af-10 years they would yield \$65 more n Treasuries for every \$100 invested. l Asquith doesn't disagree. "That's t a buy-and-hold strategy," says Alt-n. Indeed, investors who can avoid defaults earn a whole lot more.

By Jeffrey M. Laderman in New York

A SKY-HIGH BET ON THE PLANE-LEASING BUSINESS

GPA's \$17 billion order buys a huge fleet to lease at top dollar

The phrase "Irish aircraft leasing company" suggests a pretty small operation, perhaps run by a couple of former pilots in one corner of a hangar. GPA Group Ltd. is a leasing company based near Shannon Airport. But small it isn't. The gross national product for all of Ireland is \$27 billion. On Apr. 18, GPA announced orders and options for 308 aircraft worth \$17 billion.

That's the largest aircraft order ever,

cause it shoulders the financing cost and assumes the risk of re-leasing the plane. Also, GPA's customers include dozens of second-tier airlines such as Air Lanka and Air Zimbabwe, which couldn't get such good terms on their own.

GPA's operating leases provide a handsome return on equity of 20%. Profits in the year ended Mar. 31 were an estimated \$150 million on \$1 billion in revenues. Among the owners enjoying the profits

which keeps probably the best data base on used-aircraft values, stands a good chance of reselling the plane at a profit.

Fees generated from such deals contributed \$30 million to operating profits in fiscal 1988, up from \$1 million in 1984. But that's only the beginning. Ryan wants to do more deals such as the one for Braniff Inc. last year. Investors who were buying the line from Chicago's Pritzker family needed quick cash for new airplanes, too. So GPA agreed to buy 12 old jets from Braniff for \$30 million, nearly twice their real value, and lease them back to that company for a couple of years. As a *quid pro quo*, GPA got warrants for 10% of Braniff, which agreed to lease new Fokker jets from GPA to gradually replace the aging planes.

MAINTENANCE MEN. Even more ambitious is a proposed venture tentatively dubbed Fund Avia. Based in Dublin's tax-free financial zone, the fund would attract up to \$13 billion in private capital to buy airplanes that have already been leased in competition with banks and big lenders such as General Electric Credit Corp. GPA would manage the fund, collecting fees for buying the planes and marketing them.

Ryan also wants to build a division that will team up with a major European airline to handle the heavy-duty maintenance for its own jets and perhaps for others', too. The new company would eventually employ 5,000 workers—again, GPA's total of only 180 today.

Clearly, Ryan expects GPA to pay off big. The company projects at least a doubling of profits by 1993. Everything hinges, of course, on continued healthy demand for GPA's burgeoning fleet. It's

assure that demand, critics say, that Ryan is buying up so many as-yet-unbuilt aircraft. Airlines that don't plan ahead, they say, won't have any choice but to lease from GPA. There is, of course, the risk that GPA's fleet will turn into a liability should a recession kill demand.

Ryan says the orders simply anticipate customer needs. And thanks to his strong balance sheet and cash resources, he "can comfortably sit through a two-year recession," Ryan claims. GPA, however, has done nothing so far but grow. A major recession, if it comes, would be the first real test of the financial revolution Tony Ryan is starting in the world airline industry.

By Mark Maremont in Shannon, Ireland



RYAN: BUILDING AN EMPIRE THE AIRLINES CAN'T IGNORE

surpassing even Delta Air Lines Inc.'s \$11 billion order of last year. Now privately held GPA, founded 14 years ago as Guinness Peat Aviation, has more planes on order than any commercial airline. With lines of credit for \$5 billion and a hefty cash flow, GPA can afford them.

GRAND STRATEGY. GPA foresees a tremendous demand for these planes, which it will farm out to airlines through operating leases. Founder and Chairman Tony A. Ryan was a pioneer in the operating lease, through which GPA owns a plane and rents it out for a fixed period of six years or so. The short term allows airlines to keep the leases off their balance sheets and gives the flexibility to retire unneeded planes at fairly short notice. GPA gets to charge top dollar be-

are Air Canada, Aer Lingus, Prudential Insurance, Mitsubishi, and Ryan.

The \$17 billion order is just one element of a grand strategy charted by Ryan, a former Aer Lingus executive who started GPA as a broker for used aircraft. With the leasing business as a core, "we think we can make GPA into a full-service financial company" for the airline industry, explains Colm Barrington, its chief commercial officer.

GPA figures that its return on equity from fee-generating activities, as opposed to leasing income, is more than 35%. One example: If a bank lends money to an airline for a plane purchase, GPA, for a fee, will pledge to buy the plane if the airline defaults. The bank gets an insurance policy, while GPA,

THE HELL WITH GLAMOUR. GIVE ME GROCERIES

Buying Grand Union puts Gary Hirsch firmly on the LBO map

It was early 1986, and leveraged buyouts were raging on Wall Street. One by one, takeover artists were picking off attractive industrial targets: chemicals, paper, and glass, or glamour properties in broadcasting and consumer goods. But Gary D. Hirsch, an unknown would-be buyout master, had other ideas. He confided his potential strategy to Gordon M. Burns, an investment banker at Salomon Brothers Inc. "And Burns said, 'Grocery stores? You want to go into grocery stores?' Remember," Hirsch says, "this was before Safeway." It went private later that year, and the grab for control of the nation's supermarket aisles was on.

With Salomon's help, Hirsch, 39, has been one of the biggest grabbers. On Apr. 10 the two agreed to buy Sir James Goldsmith \$1.2 billion Grand Union Co. That deal will slash sales of the chains Hirsch controls to about \$6 billion this year, making him No. 6 or 7 among U.S. acquirers (table). And the deal puts Miller Tabak Hirsch & Co., best known until now as a pioneer in program trading, on the map in LBOs. Back in 1986, though, there was reason for doubt. Hirsch's retail experience was limited to helping out his father's dress shop as a kid. His previous deals, except for the \$8 million purchase in 1985 of Van Dusen Air Inc., an aerospace parts distributor and operator of airport service bases, were small potatoes.

NOT TO DO DEALS. Yet so far, Hirsch has confounded the skeptics. MTH doesn't disclose profits, but "without air of contradiction," Hirsch claims, "I can say that in the last three to five years the rates of return in our transactions have exceeded by far the averages you hear for the well-known buyout firms." Those rates are between 20% to 30%. Hirsch, intense and debatable, has also won over opponents. Says Eugene A. DePalma, chairman and chief executive of Van Dusen Airport Services Co., who had fought Hirsch: "We found out he's a quick study."

Hirsch's tale, if not quite a rags-to-riches saga, is certainly a version of the American dream. In 1972, after a year in the MBA program at New York University,

Brooklyn-born, Long Island-bred Hirsch decided not to finish the degree. Instead, he took what seemed a princely \$14,000 offer from accountant Price Waterhouse. "My mother said: 'O.K.—but don't ever do anything dishonest because you're getting that kind of money,'" Hirsch recalls.



HIRSCH'S SHOPPING SPREE

Company	Acquisition date	Price	Revenues*
		Millions of dollars	
PENN TRAFFIC	FEB. 1987	\$180	\$688
PAC FOODS	AUG. 1988	320	1,033
BIG BEAR	APR. 1989	353	991
GRAND UNION	APR. 1989	1,200	2,702

*Latest fiscal year

**Pending

DATA: MILLER TABAK HIRSCH & CO.

Eight years later, Hirsch decided he really wanted to "do deals." Says he: "Maybe it was false bravado. I'd worked with investment bankers and businessmen, and I came to the conclusion that I could do what they were doing."

SCORING POINTS. Early in 1981 he started his own company. A year later, Jeffrey D. Miller and Jeffrey Tabak, partner and trader, respectively, at Mabon Nugent & Co., signed on. The three dug into their pockets and hit up family and friends for about \$8 million in capital—a sum that is now up "substantially." Miller and Tabak did program trading and managed money, and Hirsch did deals. At first, Miller and Tabak's activities dominated the firm. But in 1986, MTH stopped trading for its own account, and Hirsch's buyouts became more critical.

Unlike most others in the LBO game, MTH has no buyout fund. Hirsch started to raise one last fall but stopped when he realized that having investors could curb his ability to do hostile deals and would force MTH to strive for a set rate of return. Instead, Hirsch uses MTH's capital and raises money from his original investors for each deal.

Otherwise, his tactics differ little from other buyout artists'. He buys undervalued companies and improves their returns. With Van Dusen, he first sold the parts distributor, then expanded the airport-services units and sold them. He plans to keep the supermarkets, however, unless an offer comes along he can't refuse. Meanwhile, Hirsch is investing in the grocery stores and coaxing better performances from his CEOs. "I never ask them to do anything they didn't think of already," he says. "I just ask them to do it more quickly."

A VISION? It's too early to tell just how good a grocer Hirsch is. But he did score points at a recent supermarket conference. "I was extremely impressed with his grasp of the operating fundamentals of the business," says Gary Vineberg, an analyst at Kidder Peabody & Co. "He recognizes the power of vertical integration." Vineberg notes that there are plenty of regional supermarkets left to buy and adds: "Clearly, Hirsch has some kind of vision."

For now, Hirsch is plowing his profits back into food distribution and retailing. His only concessions to newfound wealth, he says, have been a vacation home in Key Largo, Fla., and a 44-foot motor yacht. Hirsch says there are other businesses undergoing change that he would be interested in buying, but he won't hint what they are. Like last time, Hirsch wants to get there first.

By Judith H. Dobrynski in New York

MEDIGAP GETS A SECOND OPINION—FROM CONGRESS

Insurers are under attack for sales abuses and rate hikes



DINGELL: HIS COMMITTEE WILL PUT SELLING PRACTICES UNDER A MICROSCOPE

When Congress was created 25 years ago, innovative insurance companies created "medigap" policies to help pay costs the government left uncovered. It has become a \$13 billion-a-year business covering 23 million policyholders. But now the insurers are coming under attack: Customers are irate at premium hikes of up to 40%, some experts wonder if the policies have outlived their usefulness, and lawmakers are investigating charges of fraudulent sales practices. The elderly, says House Energy & Commerce Committee Chairman John D. Dingell (D-Mich.), "are easy prey for unscrupulous and greedy purveyors" of such policies.

The impetus for the scrutiny is a 1988 law being phased in this year that expands Medicare to cover the staggering costs of catastrophic illnesses. It will limit a Medicare patient's out-of-pocket hospital and physician costs to about \$2,000 a year, lessening the need for medigap coverage. "If you can afford the possible \$2,000 hit, there's no reason to pay \$600 in premiums for a policy," says James P. Firman, president of the United Seniors Health Cooperative, a Washington-based consumer group.

Insurers argue that medigap policies are still a good deal for seniors who can't foot a \$2,000 bill. And companies are starting to add new benefits. "There still will be a need for these policies," says Blue Cross & Blue Shield lobbyist Alan P. Spielman. "Medicare does not cover all the gaps." Take the new law's \$1,370 limit on out-of-pocket payments to physicians. The lid does not apply to fees

that Medicare considers to be too high. Already, Prudential Insurance Co. and Blue Cross & Blue Shield, which together account for two-thirds of the medigap market, sell policies that cover some excess physician charges and prescription costs.

Medigap does fill holes in the government's medical safety net. But the benefit is tainted by abuses, says Don Gartner, an assistant district attorney in California's Santa Cruz county. Most experts agree, for instance, that one comprehensive policy is enough to meet an elderly person's needs. Yet 25% of the elderly who held medigap policies in 1987 had more than one, according to the Health Insurance Association of America.

Representative Dingell is planning to unveil a five-month investigation of sales abuses at a hearing on Apr. 26. A central focus of the probe has been California. Bedrossian Insurance Agency Inc. in San Jose, for instance, is coming under trial in May on civil charges of unfair and unlawful business practices. Court prosecutors allege that Bedrossian pressured elderly consumers to purchase unnecessary medigap policies. Typical, says prosecutor Gartner, was an 85-year-old woman who spent \$13,000 on 14 policies over two years. Agency head Berge Bedrossian says "they're picking on the wrong person" because his firm only does the paperwork for independent agents.

FAILING GRADE. Some lawmakers worry that owners of only one policy aren't getting a good deal either. The reason: Rates on many policies have soared even though an insurer's potential exposure for hospital and physician costs will drop from \$50,000 to \$2,000 next year. And as part of the effort to curb runaway medical costs, the law will require that premiums be set low enough so that at least 60% of premium income is paid out in claims. More than half of the medigap policies reviewed by the General Accounting Office would have failed that test (table).

Industry officials respond by noting that only the hospital portion of catastrophic coverage went into effect this year and that premiums for that portion dropped by 12%. Insurers blame high premiums on rising doctor fees.

Still, seniors are upset about soaring health care costs, including the income surtax they'll pay for federal catastrophic insurance. About 1.6 million elderly will pay the maximum—\$800 a year for those with a taxable income of at least \$45,000. But instead of easing that bite, Congress aims to assuage elderly voters by taking a stand on fraud and claims payout standards. If Dingell goes his way, medigap insurers may have become innovators all over again.

By Susan B. Garland in Washington

MEDIGAP INSURANCE IS A HIGH-MARGIN BUSINESS

Company	Claims paid as share of premiums*
FEDERAL HOME LIFE	47.2%
GLOBE LIFE	50.8
CONTINENTAL CASUALTY	52.9
BANKERS LIFE	58.6
COLONIAL PENN	59.6
AVERAGE OF HEALTH POLICIES**	60.0
NEW YORK LIFE	76.3
PRUDENTIAL	83.0
BLUE SHIELD (PA.)	105.5

*Based on 1987 data for the top 10 medigap insurers. **Average of all medigap policies. Source: General Accounting Office, Health Insurance Administration, Washington, D.C.

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BY GENE G. MARCIAL

FINDING PLAYS WITHOUT FANCY FOOTWORK

Investment managers Russ Fogler and Ted Aronson use what they call "unemotional valuation" in picking stocks, a technique that isn't designed to spot highly speculative takeover plays. But the duo did bag many of last year's big buyout winners, including Roper, Grolier, and Federated Department Stores. In this year's first quarter they did it again, with takeover targets Shaklee, Coleman, and Citizens & Southern. No wonder Philadelphia-based Aronson & Fogler piled up a 27% total return in 1988—far outpacing the 16.8% earned by the Standard & Poor's 500-stock index. And the team's first-quarter return of 11.3% towered over the S&P 500's 4.3%.

The firm started five years ago with only about \$150,000 in assets, which have grown to \$150 million thanks to giant gains and a huge increase in client accounts. The team looks for companies with "underutilized, tangible" assets, above-average earnings yield, and a competitive management with a record of generating "bankable cash flow" and steady profit growth.

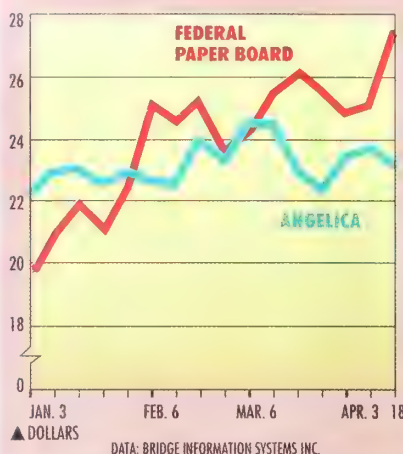
Aronson and Fogler's two newest finds—Federal Paper Board and Angelica—meet all these tests.

Federal Paper, the second-largest U.S. producer of bleached paperboard, pulp, and wood products, is a cyclical stock for investors who are betting on a no-recession scenario. The shares, currently at 27, trade at about 1.5 times book value—far below the S&P 500's price-to-book ratio of 2.4. A look at earnings also makes the stock a bargain, says Fogler. Based on last year's earnings of \$3.04 a share, the stock has a price-earnings ratio of 7.8, vs. the S&P 500's 12.2. And based on some analysts' estimated 1989 earnings of \$4.20 a share, the p-e is 6.4.

BALANCING ACT. Fogler says Federal Paper's management has reduced debt and, at the same time, improved return on equity. He notes that total debt has been cut from \$461 million in 1986 to \$380 million in 1988, allowing the company to pay a 3.6% dividend. And average annual return on equity for the past five years has been a nifty 17%.

Angelica, a St. Louis maker of uniforms and textile products, is an unrecognized value, says Aronson. Its stock,

TWO STOCKS THAT BUYOUT PROS LIKE



currently at 23, has not risen as much as Federal Paper's. Based on last year's earnings of \$1.79 a share, Angelica has a p-e of 12.8. Based on this year's estimate of \$2.15, its p-e is 10.6.

Aronson notes that management has kept total debt in the \$21 million-to-\$24 million range during the past 10 years while tripling assets to \$16 a share. Angelica, which also operates a national chain of specialty stores, generates a solid cash flow of about \$3 a share and pays out a decent dividend of 3.4%. Although both Federal and Angelica are shunned by the buyout crowd, Aronson and Fogler say the companies are "definitely takeover material."

WHEELABRATOR'S WINDING ROAD

Investors don't have much affection for a company whose assets have to be tracked with the corporate equivalent of a genealogical tree. Wheelabrator Group, for instance, is still trading at around \$7 a share, close to where it started last year.

Wheelabrator Group is in fact the old deal-oriented Henley Group, which owns a diverse array of companies. Henley renamed itself Wheelabrator Group in December and formed a new Henley Group. Wheelabrator Group then spun off the stock of the new Henley Group to its shareholders, keeping just 10%. Wheelabrator Group, the old Henley, also retained its 60% stake in Wheelabrator Technologies, a waste-recycling company.

Wheelabrator Technologies operates nine waste-to-energy recycling plants and has five more under construction.

The betting among takeover pros is that Wheelabrator Technologies, now trading at around \$24 a share, will merge with Wheelabrator Group. What is that once the two Wheelabrator merge, Waste Management, which owns about 22% of Wheelabrator Technologies, will go after the combined companies. Waste Management, the nation's largest solid- and nuclear-waste disposal company, already has an agreement for Wheelabrator Technologies to acquire or lease sites. Waste's landfills for Wheelabrator refuse-to-energy facilities.

Barry Mannis, an analyst at Shearson Lehman Hutton, notes that a combined Wheelabrator Group/Technologies would have a market value of about \$1 billion. It would be a heavily held stock in the pollution-control sector, says Mannis. All three companies declined comment.

WILL PLASTI-LINE'S PARTY GO PRIVATE?

Plasti-Line is in the sign business. It supplies huge outdoor signs to auto makers and dealers, gas stations, and fast-food restaurants. But few on the Street are looking at the stock. That could be a mistake. Corporate insiders continue to buy Plasti-Line shares, which currently trade at 11, up from a 1988 low of 5.

"Business has been surging," says investment adviser Glenn Cutler. He believes that management is preparing to take the company private. Why else would insiders be buying, he notes when management and directors already own about 71.5% of the stock. The biggest holder is Plasti-Line President and CEO Jim Martin, who owns 51%. Says John Cantlin, vice-president for finance: "All I know is that the stock is a good growth investment."

Plasti-Line has been acquiring many smaller sign-making outfits to increase production and sales. The company's principal customer is General Motors, which accounted for 20% of revenue last year. That's expected to rise to about 30% this year.

The Knoxville (Tenn.) company posted earnings of 71¢ a share last year—up sharply from 43¢ in 1987—and revenues rose to \$76.5 million from \$66 million. For 1989, sales are projected to jump to \$85.9 million, and earnings could leap to \$1.15 a share. Says Cutler: "Given the robust business the company has been having, we expect the stock to climb into the 20s."

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GOLF

THE GOLF CLUB WITH A HANDICAP ALL ITS OWN

The PGA Tour, for one, will ban Karsten Solheim's Ping irons

As he drives to opening day at the Turquoise Classic golf tournament in Phoenix, Karsten Solheim is a little nervous. "I forgot my parking badge," mutters the chairman of Karsten Manufacturing Corp., maker of Ping golf equipment. "We might have trouble getting in." Not exactly. The second Solheim steers his shiny white BMW

Tour Inc.—plan to outlaw the clubs in professional competition starting next January.

The Tour's reasoning: Square, or U-shaped, grooves enable pros to put so much spin on the ball that they can control their shots from even the most trying positions—such as deep, wet grass. Tour officials, being purists, feel those

should I?" he asks. "When it's all said and done, the USGA, the PGA, and myself will all be in agreement." By way of demonstration, Solheim grabs a scrap of paper and scribbles diagrams "proving" that his clubs actually comply with USGA regulations. His argument: The rule makers are measuring from a different point on the grooves than he is. To support his case, he has led an all-out assault on the sporting press, bombarding editors with news releases and lectures stating his way is right.

FED UP. Sorry, Karsten. The rule makers say they do not intend to back down on this issue. And your competitors—many of whom are making clubs with square grooves that comply with USGA regulations—are starting to get fed up with your efforts. "Whether the USGA is right or wrong, we have to support it," says



SOLHEIM: IS HE "PROMOTING ANARCHY BY NOT ADHERING TO THE RULES"?

into the lot, the gate attendant leaps off his stool to offer a hero's welcome. "Good to see you, Mr. Solheim!" he hollers, waving the car toward a reserved parking space. "Come on in!"

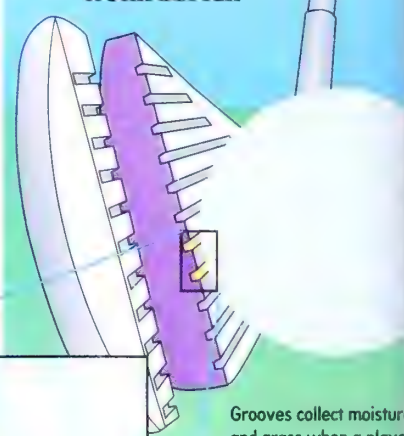
Solheim, 77, should know better than to think he would go unrecognized—at least in golfing circles. His Phoenix company is the Apple Computer Inc. of golf: Founded in his garage, where he first made putters for himself, Karsten Manufacturing has blossomed into a business with annual sales of more than \$110 million. Its Ping Eye 2 clubs are the top-selling single brand in the world, with more than 2 million sets in use.

RULES ARE RULES. But the Ping success story is only part of the reason for Solheim's high profile these days: His Eye 2s are at the center of what might be golf's most bitter debate ever. Because of the square grooves on the club's face (diagram), both of golf's most powerful bodies—the U. S. Golf Assn. and the PGA

shots ought to be more difficult. The USGA, meanwhile, has no gripe with square grooves. But it says the Eye 2's grooves are too close together. They only miss USGA regulations by about a hair's width, but a rule is a rule. So as of January, 1996, the club will not be allowed in any amateur tournament that follows USGA rules—which would include nearly every local championship and country club event.

The rulings are clearly a thorn in Solheim's side. After all, who wants to shell out \$650 to \$850 for a set of clubs that will eventually become illegal? Yet Solheim, as stubborn as he is innovative, insists he has no plans to replace the Eye 2 with clubs that conform. "Why

WHY SQUARE GROOVES WORK BETTER



Grooves collect moisture and grass when a player hits out of the rough. Since square grooves trap more debris than V-shaped grooves, the club face stays cleaner and allows more friction between club and ball. This puts more spin on the ball, making it stop more quickly when it lands.

James Hansberg, president of rival Rival Golf Corp. and a longtime friend of Solheim, "I believe Karsten is promoting anarchy by not adhering to the rules."

If Solheim is an anarchist, he is most unlikely one. The son of a Seattle cobbler, he spent more than 20 years as a mechanical engineer—14 of them working on electronic guidance systems and computers at General Electric. During that time he became an avid golfer. But because he could not mas-



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A typical Mom.

putting, he designed his own putters, which he called Ping because of the sound they made when striking the ball. The club's secret: even weight distribution, which helps shots go straight even on miss-hits. He has based the design of his other clubs, including the Ping Eye 2, on the same principle. With a \$1,100 bank loan—his only debt to date—he went to work in his garage in 1961. Six years later he quit GE to make clubs full time.

TINKERING AROUND. Despite Solheim's success with Ping Eye 2s and putters, he hasn't had great luck in other parts of the game. His woods—used for driving the ball longer distances—have captured less than 10% of the market, and his golf balls have well less than a 1% share. Bring this up, however, and Solheim affects a look of total unconcern. "We sell all we make," he says. "I've never had any ambition to do more than that."

Karsten Manufacturing, of which he is sole owner, now has 1,700 employees and ships more than 12,000 clubs a day. As it has grown, Solheim's golf handicap has suffered. It's now around 18—from a low of five. But there's one thing success hasn't changed: his love of an audience. "It's hard to eat dinner with Karsten," says golf pro Doug Tewell. "He's always taking your knife and fork and balancing them on each other to prove some point about physics." He also demands perfection in just about everything. During last year's Masters tournament, recalls a friend, the coffee at a local restaurant was a little too acid for Solheim's taste. So he marched into the

'We sell all we make,' says Solheim. 'I've never had any ambition to do more than that.'

kitchen to explain how to brew it the proper way.

Eventually, Solheim will have to retire, and among employees there is some concern about the company's future when he does. His three sons—Louis, Allan, and John—all work for him, and Solheim insists they will be well equipped to take over. But for now he is still going strong. On a typical day he can be found doing everything from grinding club heads in the machine shop to tinkering with new designs on his computer. It's Solheim's idea of paradise. "I couldn't ask for anything better," he says. "People love my clubs, and they're happy." He's right, with an important exception: the rulemakers.

By Peter French in Phoenix

Information Processing

COMPUTERS

CONTROL DATA STRUGGLES TO GET BACK IN CONTROL

The company is cutting back on its assets and ambitions



For Control Data Corp., it was a painfully pragmatic decision: Shut down its ambitious ETA supercomputer subsidiary, shrink its mainframe business, and stop pouring hundreds of millions down a sinkhole. "We ran out of time, and we ran out of money," says CDC Chairman and Chief Executive Robert M. Price. And CDC, the inventor of the supercomputer and once the leader in scientific computers, may have run out of chances to ever again play an eminent role in the industry. "It's the closing of an era," says Don Young, an analyst at Sanford C. Bernstein & Co. and a longtime CDC follower.

The Apr. 17 decision also marks the ascendance of Lawrence Perlman, CDC's new president and chief operating officer, who already seems to be acting more like its CEO. Perlman pushed for tough action on ETA Systems Inc. and the layoff of 3,100 CDC employees, about 10% of its work force. A lawyer by training with no previous connection to CDC's computer operations, he's demanding "consistent profits"—nostalgia be damned. But he must soon plot a plausible future for what's left of CDC before bankers and investors do it for him.

After overseeing three years of halting turnaround efforts, Chairman Price's influence seems to be waning. His dream, for CDC to regain its market lead in powerful computers used by sci-

entists and engineers, is shattered. Now he concedes, the company's best hope is its profitable service businesses such as market researcher Arbitron and computer maintenance. In computer sales, CDC also plans a service-oriented approach that will focus on a few industries and emphasize systems integration—installing computer systems using products made by many different suppliers.

SCROUNGING FOR A BUYER. For Price, that's a humbling change. A 28-year CDC veteran, he had been right-hand man to William C. Norris, CDC's legendary founder. When Norris retired in 1986, he chose Price to rescue CDC from the problems created by Norris' forays into dozens of unrelated ventures. Price identified ETA Systems as his best shot. He thought the tiny supercomputer subsidiary, which had been set up in 1981, could compete with market leader Cray Research Inc. Instead, ETA stumbled and never got back on its feet. It ate up at least \$238 million at a time when CDC was having trouble paying its short-term bank loans.

Price insists that ETA has been "technological success," but it never proved that in the market. ETA failed to solve some fundamental software problems and has sold just 34 ETA computers—only seven of them the most powerful models capable of competing with Cray. Last summer, Price began

unging for a buyer or joint-venture ner for the subsidiary, to no avail. utting down ETA, paying severance orkers, and disposing of assets will CDC \$350 million. The expense of g off about 2,300 other employees raise the company's write-down to million, resulting in a sizable loss in second quarter. But CDC says it ex- s to turn a profit in the second half. the wake of ETA's demise, analysts industry watchers speculate that e may retire by yearend, perhaps to d more time at his Minnesota farm. sn't discouraging the rumors: When

d at a press conference long he expected to re- CEO, he said: "There are uarantees in life."

RY DAYS. Whoever leads will have little room to euver. Analysts figure restructuring charges will out the company's cash leave it scrambling for million to \$200 million e. After CDC reached the k of technical default on ing loans, it managed to eeze \$30 million from its ts to last through May. even if it can get new ncng, analyst Young , CDC probably can't avoid t sales. Ticketron, the puterized ticketing ser-

could fetch \$100 million and is most y to go. But the company is ruling ing out.

eanwhile, the mainframe business t be fixed. The trick will be to pare it n to profitable size and intensify the s on narrower niches—without los-loyal customers. One positive sign is the market for CDC's scientific rframes is currently growing at it 11% annually—or twice the rate of overall mainframe business, accord- to Young. He figures that a well-run

CDC mainframe operation could throw off up to \$150 million in cash annually over the next several years.

CDC's systems integration strategy is more of a gamble. That's a market targeted by just about every big computer maker as well as by specialists such as Electronic Data Systems. CDC hopes that its expertise in technical areas will set it apart. The company's systems integration revenues have nearly doubled in the past three years. But CDC won't say how big the business is.

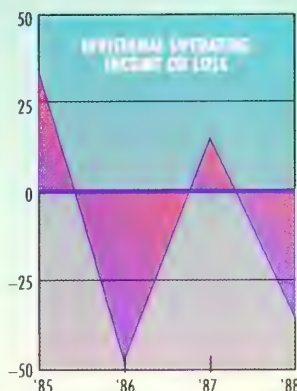
This is all a far cry from CDC's glory days. As recently as the late 1970s, its

one of the industry's strongest players.

But it was harder to revamp computers. That task went to Thomas C. Roberts, a Schlumberger Ltd. veteran hired in 1985. Despite efforts to make the operation more efficient, production schedules kept slipping. For example, for several years customers have been asking the company to adopt the Unix operating system, the basic software that is becoming an industry standard, for all its machines. But the package won't be ready for another year.

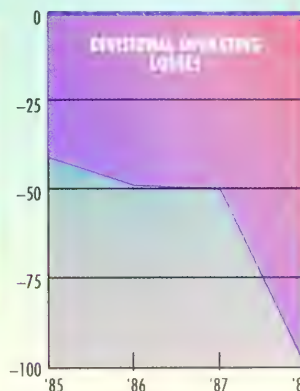
At a time when CDC needed an all-out team effort, moreover, Roberts had

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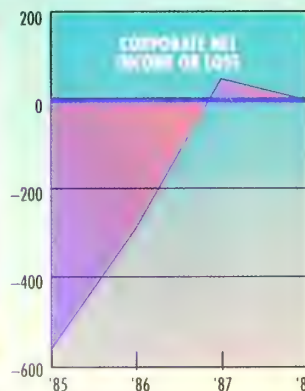
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DATA: SANFORD C. BERNSTEIN & CO., COMPANY REPORTS, BW

...CRIPPLED CONTROL DATA'S TURNAROUND



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CDC AT A GLANCE: TROUBLE WITH COMPUTERS

Line of Business	1988 Revenue	Operating profit/loss
	Millions of dollars	
MAINFRAMES	\$700.0	-\$35
TA SUPERCOMPUTERS	50.0	-100
OMPUTER SERVICES	450.0	80
EMICONDUCTOR AND OTHER	34.9	-25
OVERNMENT SYSTEMS	339.0	31
FORMATION SERVICES*	909.5	25
ATA STORAGE	1,150.0	60
SET SALES AND OTHER GAINS		39

*including Arbitron broadcast ratings service, Ticketron ticketing and lottery services, and education services

DATA: SANFORD C. BERNSTEIN & CO., CONTROL DATA CORP., BW

scientific computers dominated the market. By the time Price took charge in 1986, however, the company was in disarray. It was on its way to losing \$281 million after a \$563 million loss in 1985. With Norris pushing CDC to invest in money-losing projects such as windmill farms and inner-city factories to fulfill "society's unmet needs," management took its eye off the computer business. CDC failed to keep up with rivals, and customers switched suppliers. CDC's share of the mainframe market fell from 3.9% in 1982 to 2.2% today, according to International Data Corp.

STILL WAITING. Price did have his successes. He sold off bits of Norris' creaky empire and sharpened the company's focus on computers and information services. He put Perlman, then a novice in the technology business, in charge of reviving the company's ailing disk-drive unit. The onetime corporate counsel had already spruced up CDC's Commercial Credit Corp. subsidiary, which CDC then sold for \$843 million. Perlman then transformed the disk-drive operation, now known as Imprimis, from a money-loser into

trouble working with other CDC managers. "He was brilliant, but he wouldn't take anyone's advice," says a former CDC executive who worked for Roberts. He seemed particularly at odds with Carl S. Ledbetter, the former IBM executive who headed ETA. CDC insiders say that Roberts, who resigned in December, thought the effusive Ledbetter was hogging the limelight. He demoted Ledbetter and made him report to an intermediary. Now Ledbetter has been assigned to find new uses—or buyers—for technology developed at ETA.

DRAINED. By late 1988 losses at ETA and in the mainframe business put the entire company in jeopardy. CDC's cash had shrunk from \$301 million to \$31 million. CDC finished the year earning only \$1.7 million on \$3.6 billion in revenues. And Wall Street began talking takeover. CDC's directors, one-third of them new since 1985, gave the president's chair to Perlman in December and charged him with fixing up the computer business.

Although drained by his struggle, Price doesn't seem unhappy with the new arrangement. "My ambition is to get out of the papers," Price said recently. "I'm perfectly content to let [Perlman] have the publicity." At least Price has someone to share the hot seat.

By Russell Mitchell in Bloomington, Minn.



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HUMAN GENE THERAPY: AFTER A LOT OF HOKING, NOW THE LEAP

The first use: Putting altered cells into a patient to improve a promising cancer treatment

In 1985 the National Institutes of Health decided that scientists had learned enough about altering genes to begin accepting proposals for the first experiments on humans. Modified human cells promised cures for a range of deadly diseases, from sickle-cell anemia to Tay-Sachs. A team headed by William Anderson at the National Heart, Lung & Blood Institute proposed to use genetically modified human bone marrow to treat a patient with a genetic disease called ADA deficiency. That heavy immune deficiency leaves its victims so prone to infection that they must live in near-total isolation.

At the time, the scientists voted not to submit the proposal—they still weren't sure their scheme would work. Several authorized experiments conducted in other countries had gained nothing but demands for the U.S. scientists' heads. So only now is Anderson about to make the NIH-approved attempt to put modified human cells into a patient. And the goal—improving a promising cancer treatment—signals a new approach to gene therapy.

Modifying bone-marrow cells remains the aim of many scientists. Because these cells continually divide to replenish blood, they could manufacture a steady flow of cells that produce hormones, enzymes, or other substances missing in the patient's body. If they succeed, cures for all sorts of genetic deficiencies would be a step away. But Anderson and others now see promise in using more easily manipulated cells that could deliver proteins and hormones to treat a wider variety of scourges like cancer, AIDS, and heart disease. "All of a sudden the pie-in-the-sky stuff people have been hearing about for years is becoming a reality," says Anderson.

Working with Genetic Therapy Inc. in Bethesda, Md., Anderson and NIH colleagues Steven Rosenberg and Michel Blaese will inject a patient with the patient's own cancer-fighting white blood cells. Those cells will carry an additional bacterial gene, inserted by the researchers, that will act as a tag. That will allow Rosenberg to identify the cells that are best at destroying tumors.

The NIH is proceeding cautiously with the still-controversial experiment. A trying series of government safety and ethics reviews held up the experiment for more than a year. "I can't think of any other proposal in the history of biomedical science that has been subject to such

thoroughgoing scrutiny," says LeRoy Walters, director of the Center for Bioethics at Georgetown University's Kennedy Institute of Ethics. "If we drop the ball and do something stupid, it could set back the whole field," admits NIH's Anderson.

If the experiment goes as planned, it will allow Rosenberg to enhance his strategy for attacking tumors. Under this approach, researchers remove sections of tumor from a patient and isolate antitumor cells called tumor-infiltrating lymphocytes (TILs). The TILs are grown in the presence of interleukin-2, a substance that stimulates them to divide and become more potent. They are then injected back into the body, where they seek out and destroy cancer cells.

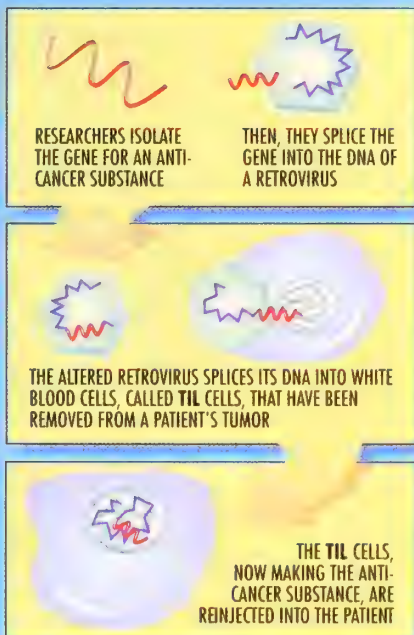
The treatment doesn't always work, however. One problem, says Rosenberg, is that "TILs include a lot of different kinds of lymphocytes. We don't know which kinds are the most effective." The NIH tagging experiment should help him identify the most powerful cells.

AIDS DECOY. Next, it may be possible to soup up the TILs by adding genes that cause the cells to make anticancer substances. The transfer is accomplished by attaching the desired gene to a so-called retrovirus, which then splices the gene into the cells' DNA as it infects them. In the lab, the researchers have successfully inserted the genes for natural cancer fighters such as tumor necrosis factor and interferon (illustration). Rosenberg says he hopes to apply for approval for human experiments later this year.

Optimistic that the technology is about to be applied, three companies devoted to gene therapy have sprung up in the past two years, and more may be on the way. "We and the others are just reaching the point where real product development can take place," says Greg Phelps, CEO of San Diego's Viagene Inc.

Cancer is not their only target. At Viagene, for example, researchers have their sights on AIDS. Their approach is to put genes into cells that make them more susceptible to existing drugs. One possible candidate: antiviral compounds such as Burroughs-Wellcome Co.'s AZT. Meanwhile, researchers at Genetic Ther-

GENES FIGHTING CANCER



DATA: BW



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EXECUTIVE SOFTWARE

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apy, along with NIH researcher Robert C. Gallo, plan to alter cells to deliver an anti-AIDS protein known as CD4. The protein is the receptor on white blood cells that allows the virus to infect them. Researchers want to flood the body with CD4 to sop up the AIDS virus before it can infect living cells.

Genetic Therapy plans to remove some blood vessel cells, alter them, then put them back in the body, where they will make large quantities of CD4. In rats, the company researchers have inserted the gene for CD4 into cells that grow into networks of blood vessels.

Others, such as Somatix Corp. in Cambridge, Mass., believe still other diseases could be treated with patches of genetically altered skin cells. The company was founded last year by Richard Mulligan, a Massachusetts Institute of Technology molecular biologist who pioneered using retroviruses to carry genes

Researchers have already produced skin cells that make everything from human growth hormone to insulin.

into living mammal cells. Somatix researchers have already produced skin cells that make everything from human growth hormone to insulin. Grafting these tissues may one day provide effective treatments for such diseases as dwarfism and diabetes. "We have boosted the amount of protein being made so that the skin graft can be seen enough," says Somatix's senior scientist and co-founder, Jeffrey Morgan.

Meanwhile, at the University of California at San Diego, scientists have transformed cancerous human retinoblastoma cells to normal ones by replacing the mutated, cancer-causing gene with a normal one. Other teams have corrected an inherited defect in cholesterol metabolism in the liver of rabbits and have used new genes to reverse brain degeneration in rats.

Moreover, the hope of one day planting genes in bone marrow cells to cure genetic diseases is still very much alive. Researchers at Duke University and Baylor College of Medicine have successfully implanted the gene for ADA deficiency into human bone-marrow cells. So, while researchers still emphasize that potential treatments for people years away, they are more confident than ever that gene therapy will one day live up to its promise.

By John Carey in Washington

Developments to Watch

EDITED BY WILLIAM D. MARBACH

WHAT HAS SIX CYLINDERS, FOUR ON THE FLOOR, AND 32 BITS?



When you buy your next car, you may get a powerful PC in the bargain. That isn't just a sales gimmick: Starting with 1993 models, some General Motors Corp. cars will come with the "brains" of an Apple Macintosh II computer tucked under the hood. The new micro-marvel is a 32-bit chip developed jointly by GM's Delco Electronics Corp. and Motorola Inc. It packs 422,000 transistors

and eight times the number-crunching capacity of today's automotive controllers. It costs just twice as much as today's eight-bit designs, but since it will replace the two used in many cars, per-car costs won't budge.

Delco wants the extra power to manage the increasingly complex car of the future. The new microcontroller has enough juice to regulate the engine, transmission, brakes, and suspension and still power a cruise-control system. The chip also flags pollution-control malfunctions, a feature that California may require on all mid-1990s models sold there.

The deal with Delco seems to assure Motorola's continuing dominance in the auto electronics market. GM will buy 300,000 chips the first year, and volume could eventually hit 1 million a year.

Should GM need still more oomph, Motorola recently unveiled a super-microprocessor, the 68040, that will cram 1.2 million transistors onto a thumbtack-size slice.

EASE PLASTICS ALONG WHEN TO LEAVE

Biodegradable plastics could ease a problem plaguing most American cities: overflowing landfills. But despite years of research, such materials have not found a wide market. The problem is with chemical additives that cause them to disintegrate. The presence of light last for years when they are buried. Another type, in which the plastic is mixed with starches that are digested by soil bacteria, is sensitive to moisture, making it difficult to process in the factory.

Mani Narayan, a research scientist at Purdue University's Laboratory of Renewable Resources Engineering, may have found a solution. Instead of using starch, Narayan substitutes cellulose acetate or starch acetate. These materials are sensitive to moisture, and higher levels of them can be added into the plastic. As a result, the new plastics remain flexible and flexible, yet will still biodegrade in a landfill. Narayan expects his materials to cost only slightly more than today's plastic resins.

WHEELCHAIR THAT WILL CLIMB A WALL, IF YOU LET IT

Motorized wheelchairs provide mobility for thousands of disabled persons, but no one has found a way to enable wheelchairs to climb stairs or traverse rugged terrain. Now at Technologies Corp. in Sunnyvale, Calif., has developed a Access Mobility System that rides on treaded belts, like a

miniature tank, and has sonar sensors that detect and measure the steepness of obstacles or depressions.

When the vehicle moves up or down an incline, a microprocessor triggered by the sensors tilts the seat to accommodate the angle. On stairs it adjusts a patented aluminum platform that braces the unit on top of each step.

Previous attempts to commercialize such technology have failed to win product liability insurance in the U.S. But Quest's built-in safety features, which prevent the rider from tilting more than 22 degrees or climbing a grade of more than 36 degrees, have hurdled that obstacle. "This thing will climb a wall, if you let it," says President Tony D. Castagna. But it won't come cheap. Access, which is awaiting Food & Drug Administration approval, will initially be marketed through hospital occupational therapists for \$20,000.

SOON ALL CARS MAY SHIFT LIKE MASERATIS

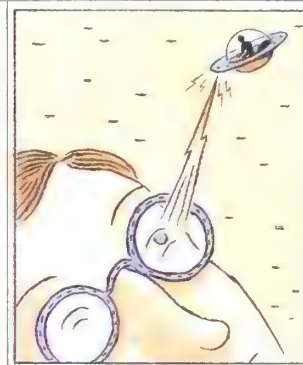
Anyone who has ever driven a Ferrari or a Maserati will tell you that few other cars have the same crisp feel when shifting gears. Most carmakers can't afford the precision-ground, tight-tolerance gears that go into such finely tuned racing machines. But that may change if Maurice F. Amateau, an engineering science professor at Pennsylvania State University, has his way.

Amateau has been refining a technique called ausforming that promises to trim the cost of precision gears by 50% or more, making them affordable even in Detroit's economy models. Instead of grinding the gear into shape, which can take more than 30 minutes, the ausforming technique uses a special rolling die that "irons" gear teeth to their final close-tolerance shape. The roller die, which is a very accurate mirror image of the gear, presses the surface of the steel into shape, like a rolling cookie cutter. If the gears are fairly warm—about 450F—the dies can do the job in 30 seconds or less. Amateau expects to have a prototype machine in a couple of years that will spew out 120 precision gears an hour.

SPOTTING CATARACTS BEFORE IT IS TOO LATE

With current eye examination techniques, cataracts are often not detected until the condition is advanced enough to require a lens replacement. Now a new instrument developed at Georgia Institute of Technology may identify them early enough to avoid surgery. The device uses a low-intensity laser—no more powerful than the light used at supermarket checkouts—to probe a patient's lenses, looking for signs of the proteins that eventually form cataracts. If the trouble is spotted at this stage, it may be alleviated with drugs or lifestyle changes.

The instrument is sensitive enough to detect differences between a normal lens and one harboring cataract-susceptible proteins. It can also extract information about the chemical nature of the protein and how fast it is forming. Nai-Teng Yu, a chemistry professor and head of the Georgia Tech team, will use diabetics—a group at high risk for cataracts—to test and develop standards for the device. He predicts that it could be in ophthalmologists' offices in three years.



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E STARTED AT THE TOP ID WORKED HIS WAY DOWN'

case against California tycoon-politico Richard Silberman

om the humblest of beginnings, Richard T. Silberman scrapped his way to success. His investment in a wide restaurant chain, Jack In The made him a millionaire at age 38. his influence in California soon d to the state capital, where he was adviser to former Governor Ed-G. (Jerry) Brown Jr. In San Diego, s even a bridge named after him.

Silberman's story has taken a ering turn. On Apr. 7, in a room at Diego's Hyatt Islandia, he placed under arrest. Follow- a two-and-a-half-year under-operation, the FBI charged in ffidavit that Silberman, 59, aundered \$300,000 in purport-ug money from Colombia and e was negotiating to launder dditional \$1.1 million. What ded is a tale of furtive meet-with mobsters, couriers pick-p shoe boxes filled with cash, an attempt by Silberman to nderworld figures to rough double-crossing cohort. Sil-an, who faces a possible fine 50,000, and up to 20 years in n, is to be arraigned on Apr. Silberman and his attorney not be reached for comment. at would compel him to take a wrong turn? Many of Sil-an's friends are at a loss. knew him as a wealthy pa-of the local arts and the hus-of Republican San Diego ty Supervisor Susan Golding, is not implicated in the mon-dering scheme. But others ulate that Silberman may

simply become desperate for mon-Dick started at the top and worked ay down," says Representative Jim s (D-Calif.), who has known Silber-for two decades. "Later indications : that he hadn't been doing so well."

SILBERMAN'S SON. That's something of an erstatement. His main business, a l gold-mining company called Yuba ral Resources Inc., has had only profitable year since he took control 83. In the nine months ended Dec. : lost \$2.2 million on revenues of \$1.6

million. It also has had some trouble paying its bills: On Apr. 1, Yuba missed a \$130,000 payment to the Interior Dept.—money it owed for mining on government land. Yuba's stock, of which Silberman controls 2.9 million shares, has steadily declined since he came on board. Once trading at around 6¼, it has slumped below 1. Silberman has resigned as chairman and CEO. Other Yuba officials, who are not implicated in the scheme, deny the company was involved.



SILBERMAN WITH WIFE GOLDING: SHE IS NOT IMPLICATED IN THE MONEY-LAUNDERING CHARGES BROUGHT BY THE FBI

Silberman has had brushes with trouble before. In 1979 he was chastised by Democratic bigwigs for raising \$15,000 in political contributions from two donors with reputed links to organized crime. And among the original investors with Silberman in Yuba was J. David Dominelli, a futures trader who later was convicted of swindling customers with fraudulent currency investments. Silberman was not implicated.

But news of Silberman's arrest was still a shock in San Diego, where he was

considered a classic American success story. The son of a Russian immigrant junkman, he put himself through San Diego State University by repairing television sets. In 1965, with money from a small electronics firm he founded after graduation, he joined Foodmaker Co.—owner of Jack In The Box—as a general partner. In 1968 it was sold to Ralston Purina Co. for \$58 million. After several years as president of Southern California First National Bank, he became the chief fund-raiser for Jerry Brown's Presidential campaign. He went on to hold a number of state jobs before he and a few partners acquired Yuba.

GIFT-WRAPPED. The FBI says it was investigating Chris Petti, a convicted bookie and a man described by feds as a mobster, when Silberman stumbled into the picture. He approached Petti last October with an offer to launder money, the feds say. A month later, at San Diego's Stardust Hotel, Petti allegedly introduced Silberman to Pete Carmassi. According to the FBI's affidavit, Petti knew Carmassi as a New Jersey money launderer for Colombian cocaine dealers, but he was actually an FBI agent using an assumed name. Carmassi says Silberman bragged that "I've done this [for] 15, 20 years."

In November, the affidavit says, Silberman sent a courier in a Mercedes-Benz to an airport hotel to collect \$100,000 in \$100 bills packed in a shoe box wrapped in red gift paper. The money was to be transferred to Switzerland, while Carmassi got 50,000 shares of Yuba American Gold Ltd., a Canadian affiliate. In February, Carmassi gave Silberman an additional \$200,000 crammed into a hotel laundry bag in exchange for Treasury bearer bonds, the feds say. That deal allegedly soured when the bond seller, Terry Ziegler, shortchanged Carmassi by \$50,000. The feds say Silberman asked Petti to put the muscle on Ziegler. Petti allegedly arranged for a thug to rough up the broker but couldn't lure him out of his office. Ziegler and Petti could not be reached for comment.

Even while purportedly laundering money, Silberman did his best to keep up appearances. In the midst of one deal, agents say, he jetted to Washington for a week to attend George Bush's inauguration. It was a perfectly natural trip for someone with Silberman's political connections. But in the end, connections of another sort may be his undoing.

By Kathleen Kerwin in San Diego

ZOOMING IN ON THE RIGHT CAMCORDER



When it comes to high technology, things seldom get simpler. Initially, VCRs—and the camcorders that came after them—were available in two formats, Sony's Beta and just about everyone else's VHS. But while the choice of a VCR has narrowed sharply as VHS became dominant, deciding what kind of camcorder to buy has become extremely complicated. Which format will it be: VHS, 8mm, VHS-C, Hi-band 8mm, or S-VHS? And should you pay as little as \$900 for a basic unit that's amazingly easy to operate or pour \$3,000 into a top-of-the-line model with an array of exotic features?

To the eye, the differences between camcorders of competing formats are self-evident. The typical VHS unit is large, designed so that some of its 8 or 9 pounds rests on your shoulder. It uses standard 2-hour VHS tapes, just like the ones in your home VCR. A VHS-C camera is smaller and lighter, about 3 pounds; its smaller cassette records for 60 minutes and can be played on your VCR, too—if it's dropped into an adapter to bring it up to size. An 8mm camcorder is just as small and light but uses an even smaller 2-hour cassette.

VISIBLY BETTER? The 8mm cassette won't play in your home VCR—and the apparent lack of "compatibility" has slowed acceptance of the 8mm format in the U.S. But that doesn't mean you'll need a whole separate unit to play back your tapes.

Whatever its format, a camcorder is basically a full-featured VCR with a lens and microphone. At any time, you can view the original tapes you've made simply by hooking the camcorder to any TV. So, whether you have a VCR at home or not, the camcorder itself can put the pictures on your TV screen at the touch of its "play" button.

Which format puts the best picture on the screen? The distinctions are so subtle that even experts say there isn't much difference. True, the recently introduced S-VHS (S for super, that is) and Hi-band 8mm models produce images with more lines of horizontal resolution than the original VHS and 8mm systems—400 vs. 240. But unless you have a monitor-quality video receiver, notes Robert Gerson, editorial director of *TWICE*, an electronics industry publication, you won't see a difference worth hundreds of dollars extra.

When comparing models, don't automatically choose the lightest, smallest one you spot. Holding even a 3-pound camcorder in one hand

for several minutes can become tiring; you might be more comfortable with a slightly larger, heavier unit that rests some of its weight on your shoulder. And pictures might be steadier. Canon's new, top-of-the-line Hi-8 A1 (\$2,300) has dual controls for one-hand use when it's held with both hands like a 35mm camera.

FINE TUNING. Most first-time camcorder buyers discover that format compatibility comes even less of a purchase factor when they see or simply it is to edit and make copies of their home movies. As easily as it gets hooked to a TV, any camcorder can be connected to the VCR home to your TV. Then, by plugging the electronic signals from the original tape into the camcorder's "fast forward" button, you race through boring stretches you've taped, and release the "pause" button as a desired scene shows up on the screen again.

Nearly two-thirds of the 2 million people who bought a camcorder this year tilted toward full-size VHS units. The initial sales of the cassettes, at least, looked familiar. But 8mm, with about 25% of sales, is fast gaining ground—with good reason. In the

CANOVISION A1-Hi8

Photographers who still find the video world hard to grasp may like Canon's camcorder. Its Hi-Band 8mm format provides superior resolution, and an extra grip on the back lets shutterbugs heft it like a 35mm camera





de comparisons, it's hard to see differences in picture quality, and 8mm's recorded image is superior. Further, Gerson, copies made from 8mm originals have noticeably more detail than those made from VHS tapes. Copies made from the new 8mm and S-VHS videos are said to be as good as the originals.)

Among features of models from various makers, auto-exposure, autoexposure, and automatic white balance (which adjusts for lighting differences) are standard. Solid-state devices have replaced the heavier electronics used in early camcorders, which often produced vertical streaks caused by light leaks in a scene.

ME ENCOUNTERS. Virtually any camcorder will video in ordinary room-light or low-light situations. But when the light dims, the image gets grainier. The "lux" number indicates how well the camcorder works in dim light, and the lower the number—from 8 on standard models to just 1 on some S-VHS—the better.

The once-standard 6-to-1 zoom lens that takes you six times closer to a photo of a subject is fast giving way to more powerful zooms. Among VHS-C camcorders, Sharp's VL-C650U model (\$400) has an 8-to-1 zoom, while there's a 12-to-1 zoom in full-size VL-L250U unit (\$500). But keep in mind that as you shoot with a long zoom, any jiggling of the camera is magnified. Panasonic's VHS model PV-460D (\$500), with a 10-to-1 zoom, has an electronic gyro that stabilizes the lens



to ensure smooth images at all times, even when you shoot from a moving car.

Another desirable feature that is rapidly becoming standard is the flying erase head, which lets one scene follow another with no annoying blips or color streaks between pictures. In RCA's new ProEdit line of full-sized VHS camcorders (\$1,500), it's combined with a dubbing switch that lets you record a new soundtrack to add narration or music to a scene you have shot. There's also a special-effects animation switch: You can take frame-by-frame photos of, say, a toy car in different positions, and then play the tape to show the car moving by itself.

Some models have built-in "character generators" that print titles and dates over scenes you record, and remote-control devices so you can operate the camcorder from across the room. That's handy if you plan to tote it along on vacation to use as a VCR.

BARGAIN DOGS. Be wary if you're steered toward a "closeout" camcorder. At \$500 or so, it probably doesn't have playback capability: It will record, but its tapes must be played back on a separate VCR deck. The tip-off is usually the lack of an elec-

tronic viewfinder, a small black-and-white picture tube in the eyepiece that shows what you're taping.

Whatever the format, a single battery typically lets you



RCA CC320

For the George Lucas in you. The ProEdit camcorder offers advanced editing features such as audio dubbing as well as such special-effects functions as animation and time-lapse recording

record for 45 to 90 minutes and recharges in about an hour. So you'll want to always have at least one spare (\$50) on hand. A camcorder's omnidirectional microphone will pick up nearly any sound your ears can hear, including your own narration as you tape. Hi-band 8mm and S-VHS models can record stereo sound—the single microphone housing encloses two mike elements pointing left and right.

For professional-sounding recordings, minus echo and background noise, anyone speaking at a distance from your camcorder should use a wireless mike. It transmits the voice to a receiver plugged into the camcorder. At about \$115, Chicago-based Sima Products' Soundcatcher in-

cludes both a hand-held mike and a tie-clip model.

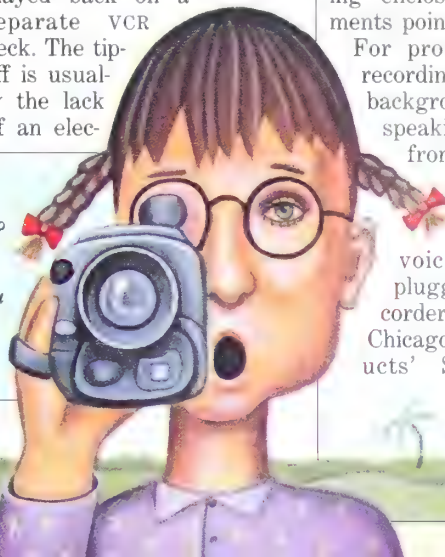
Getting good pictures requires good lighting, even with a low-lux camcorder. Using miniature bulbs similar to those used in slide projectors, a tiny lighting unit weighing just a few ounces and powered by a rechargeable battery can be mounted atop the camcorder to turn night into day. The cost: about \$100.

If you want your raw tapes to look like Hollywood productions with fancy scene changes, colorful graphics, and special effects, look into a computerized editor: DirectEd Plus, from Videonics (408 866-8300). It's the ultimate accessory, at about \$600—but you may find it priceless when you start searching a two-hour cassette for 30 precious seconds of your child's first steps.

Don Dunn

ARP VL-C650U

Looking for maximum vroom in a zoom? The standard six-power lens isn't enough, this VHS-C camcorder gives you 1. Still hungry for power? Another ARP model packs a 12-to-1 lens



Smart Money

STEADY INCOME, LOW RISK. THIS CAN'T BE REAL ESTATE

For risk-averse investors seeking a steady source of income, there are CDs, Treasuries, and... real estate. Although usually seen as speculative, some 20 real estate limited partnerships (RELPs) now offer a conservative slant. Known as triple-net lease RELPs, they can combine steady income with the inflation protection of real estate.

These RELPs will buy a completed building and lease it to a commercial tenant who pays property taxes, maintenance costs, and insurance (the "triple net"). All the RELP does is collect rent—which is why "the industry calls them 'no-brainers,'" says David Kennedy, editor of the *Limited Partnership Review*.

These partnerships just collect rent—tenants pay all costs

The rent translates into returns of 8% to 10% once the RELP is fully operational. Admittedly, that's about the same as the rate on T-bills, which are infinitely more liquid. And the sales commission and upfront sponsor fees nick up to 20% from your initial stake. Still, the RELP can bring a rising rate of income because the leases allow for rents to escalate based on a price index or the tenant's gross sales. For example, returns from W.P. Carey's Corporate Property Associates 2 have climbed steadily from 8% in 1981 to a current 15.5%.

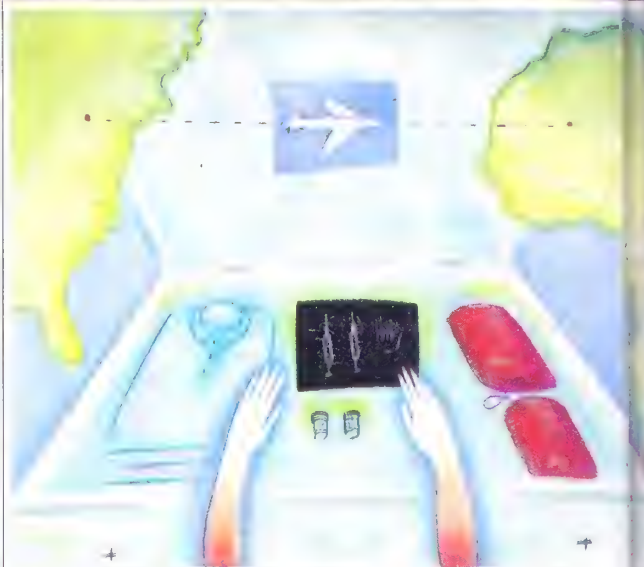
CASH ONLY. To reduce the risk that comes with hefty debt, triple-net partnerships typically buy properties for cash only and go for diversi-

ty. Realty Income's RELPs invest in as many as 50 properties around the U.S., and tenants range from La Petite Academy day care centers to Golden Corral steak houses. Because the leases are long-term obligations, "they can provide a highly predictable cash stream," says Doug Altabel of Lepercq Capital Partners, which is launching Net 2, a \$50 million RELP.

Even so, that stream could dry up if a tenant fails and the building stays vacant for a long period. Carey suffered such a nightmare with its first public RELP when a major tenant ran into trouble and vacated three buildings. The market (Denver) was overbuilt—and four years later, one property still has empty space. The RELP's return fell from 7% to 5%, where it has been ever since.

Reliable sponsors tend to develop track records with companies: CNL Group, whose RELPs invest in fast-food chains, has relationships with Burger King, Wendy's, and Pizza Hut that go back 11 years and several offerings. And since the key to a good real estate investment is "location, location, location," sponsors should also play an active role in evaluating sites. "We don't just take anything a company wants to sell us," says Gerald DeLong, marketing director for Realty Finance.

Triple-net lease RELPs may offer some capital appreciation when they begin selling properties, usually after 7 to 12 years. But don't count on a big profit: "Special-purpose" buildings, like restaurants, can be difficult to unload, says William Brennan, tax partner at Ernst & Whinney in Washington. But if steady cash flow is your aim, a "no-brainer" RELP could be a smart idea. *Troy Segal*



Health

TAKE AN OUNCE OF PREVENTION TO THE THIRD WORLD

Travelers to less-developed countries have long worried about medical emergencies—doctors can be scarce and medicines unavailable. Now AIDS has heightened the danger, especially in places too poor to afford disposable syringes.

To reduce the risk, ask your doctor or corporate medical department to help you do what U.N. staffers now do on trips: Each carries a sterile packet of a hypodermic syringe and a couple of needles. Yes, get a note from the doctor to ward off any trouble with customs officials.

DAILY DOSE. Some travelers go to even greater lengths. Mirtha Halim, a Stamford (Conn.) economist who frequently goes abroad, carries in her hand luggage an intravenous kit holding two pints of liquid blood expander, a clear solution of salts and minerals. "If you need a transfusion, the liquid can keep your system's volume up until you reach a hospital where the blood supply is safe," she explains.

Ask, too, about new thinking against an old scourge: malaria. The World Health Organization prefers the pre-

ventive Paludrine, while the Public Health Service favors a standard, Chloroquine. Some doctors recommend both. Paludrine works best, say its adherents, because taken daily. Chloroquine, downed weekly, must be taken for four weeks after you get home. "Folks tend to get it once they're back," says a health officer. "The daily dose routine is easier to remember." *D. H.*

Worth Noting

■ **WILDLIFE WRITE-OFF.** Planning volunteers on Earthwatch's (617 926-8200) search trips observe crabs in China, tag kangaroos in Australia, or count deer in Poland, to give a few examples. The cost of the trip (from \$695 to \$2,400, plus airfare) is tax-deductible.

■ **HEAD START.** Thinking of starting a startup? Call a Small Business Administration computer (800 368-5811) for some basic information.

■ **SUNLIGHT.** Heliopower (800 34-HELIO) says its solar-powered fluorescent lantern—3.3 pounds, \$130—can provide five hours of light

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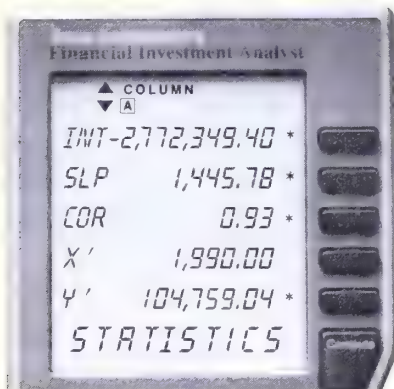
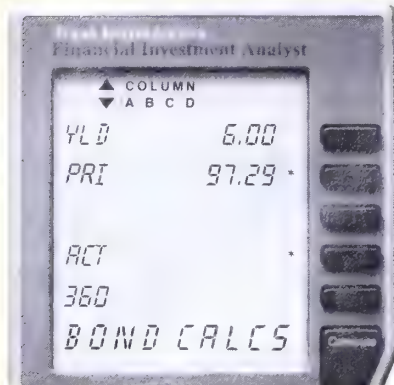
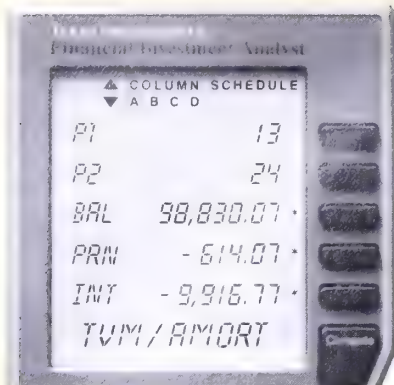
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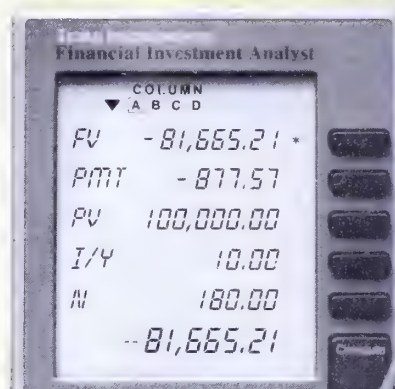
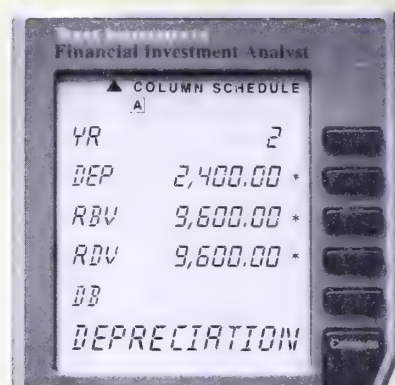
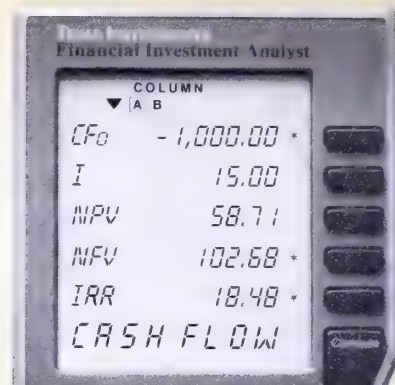
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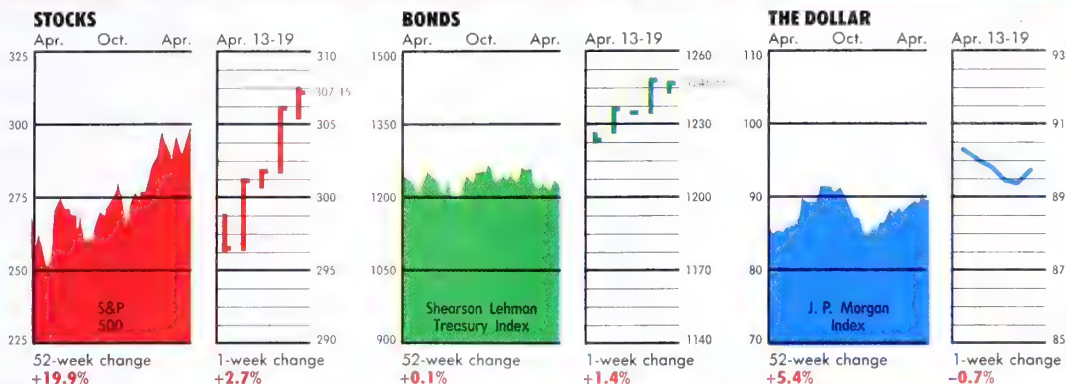
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Investment Figures of the Week

MARKET COMMENTARY

and bonds rocketed to new levels, with the Dow spurt-postcrash highs. New numbers showed investors' concern over inflation and higher interest rates. The 0.5% rise in the March consumer price index was less expected and was perceived as a sign that inflation was manageable. And the surprise 5.4% increase in March housing starts, with a 1% plunge in building permits, led analysts to predict that interest rates won't have to keep pushing higher.



MARKET ANALYSIS

STOCKS	Latest	% change	
		Week	52-week
DOW JONES INDUSTRIALS	2386.9	2.9	20.2
COMPANIES (Russell 1000)	162.1	2.4	19.4
COMPANIES (Russell 2000)	162.5	0.8	14.7
COMPANIES (Russell 3000)	174.1	2.3	19.0

INTERNATIONAL STOCKS	Latest	% change (local currency)	
		Week	52-week
DOW JONES FINANCIAL TIMES 100	2082.6	2.4	16.6
NIKKEI INDEX	33,363.8	0.3	24.2
TSE COMPOSITE	3599.9	0.9	7.6

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.7%	9.0%	5.8%
30-YEAR TREASURY BOND YIELD	9.0%	9.1%	9.0%
S&P 500 DIVIDEND YIELD	3.5%	3.6%	3.6%
S&P 500 PRICE/EARNINGS RATIO	12.3	12.0	14.2

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	285.1	284.1	Positive
Stocks above 26-week moving average	63.2%	60.6%	Neutral
Speculative sentiment: Put/call ratio	0.22	0.21	Negative
Insider sentiment: Vickers sell/buy ratio	1.39	1.36	Positive

INDUSTRY GROUPS

WEEK LEADERS	% change	
	4-week	52-week
SEMI-CONDUCTORS	16.3	-9.7
TELEPHONE	15.9	55.4
REBUILDING	14.0	39.3
RETAIL	13.2	25.7
HOSPITAL MANAGEMENT	11.6	27.7

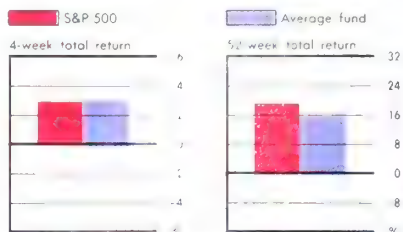
WEEK LAGGARDS	% change	
	4-week	52-week
COAL MINING	-5.3	-1.2
TRUCKING FIRMS	-2.9	23.4
HEALTH CARE SERVICES	-2.7	-30.9
REAL ESTATE INVESTMENT TRUSTS	-1.6	-4.2
TRUCKS	0.1	11.0

Strongest stock in group	% change		Price
	4-week	52-week	
INTEL	24.3	-3.7	29 3/8
NWA	56.7	141.2	97 3/8
PHM	32.1	94.7	13 3/8
WESTMORELAND COAL	21.5	5.3	19 3/4
AMERICAN MEDICAL INTL.	24.3	30.8	21 3/4

Weakest stock in group	% change		Price
	4-week	52-week	
NEWMONT MINING	-7.0	1.4	36 1/2
MORGAN STANLEY GROUP	-11.5	38.3	61 3/8
BEVERLY ENTERPRISES	-6.7	37.3	8 3/4
LOMAS & NETTLETON	-5.5	-20.3	17 1/8
CHRYSLER	-1.5	5.4	24 1/2

MUTUAL FUNDS

WEEK LEADERS		LAGGARDS	
Week total return	%	Four-week total return	%
WILL & BEAR SPECIAL EQUITIES	15.7	STRATEGIC GOLD/MINERALS	-6.8
FIDELITY SMALL CAPITALIZATION	8.8	SLH PRECIOUS METALS	-5.9
FIDELITY UFMANN	8.7	MIDAS GOLD SHARES & BULLION	-5.4
52-week total return		52-week total return	
	%		%
FIDELITY UFMANN	70.4	STRATEGIC GOLD/MINERALS	-23.0
COLUMBIA SPECIAL	40.3	STRATEGIC INVESTMENTS	-15.8
WELLS FARGO CAPITAL APPRECIATION	40.2	SLH PRECIOUS METALS & MINERALS	-12.1



RELATIVE PORTFOLIOS

Amounts sent the present of \$10,000 after one year in each portfolio	U.S. stocks	Foreign stocks	Treasury bonds	Money market fund	Gold
Figures indicate average total returns	\$12,082 +2.52%	\$11,860 +1.37%	\$10,875 +1.85%	\$10,664 +0.16%	\$8,414 -0.27%

Figures on this page are as of market close Wednesday, Apr. 19, 1989, unless otherwise indicated. Relative portfolios are valued as of Apr. 18. A more detailed explanation of this page is available on request.

BRING CEO PAY BACK DOWN TO EARTH

It's that time of year when all eyes turn to corporate proxy statements to see how much the boss made. The numbers are up a lot, setting new records for top management pay. Total compensation, including salaries, bonuses, and long-term compensation, surged 14% for the 354 top executives surveyed by BUSINESS WEEK—in a year, after all, when profits leapt ahead by 32%.

But the current numbers reflect a disturbing trend that has been accelerating for the past two decades. Executive pay is growing out of all proportion to increases in what many other people make—from the worker on the plant floor to the teacher in the classroom. Running a big company involves responsibilities that have always commanded a hefty premium. In 1960 the CEO earned 41 times the factory worker's wage, 38 times the school teacher's, and 19 times the engineer's. But last year, according to our survey, the average chief executive received more than \$2 million in total compensation. That is 45 times the average compensation of a middle manager. That's 93 times the \$21,725 earned by the average factory worker, 72 times the \$28,008 made by the typical teacher, and 44 times the \$45,680 the average engineer brought home. Years of outsized raises for top executives, combined with a steady stream of added goodies ranging from stock options to golden parachutes, have created a yawning gap between CEO pay and nearly everyone else's pay—even in the same company. Tax reform has made the gap even larger. Once taxed at a 91% marginal rate, executives are now paying only a 28% rate.

Executive compensation has mushroomed to a level that is difficult to justify. The image of business will undoubtedly suffer. It is an issue that many politicians will surely pounce on with higher taxes and other punishing measures.

Companies must, of course, pay competitive salaries and reward strong performance. Many corporations have wisely linked compensation more closely to corporate results. The mistake has been adding new programs that produce more and bigger bonuses without taking into account how overall CEO compensation is soaring while most other folks are treading water. If corporate directors don't do something about this troubling trend, someone else will.

LET'S END PRICE CONTROLS ON NATURAL GAS, NOW

After 35 years of regulating the wellhead price of natural gas, the government now seems on the verge of ending this madness. The move couldn't come at a better time. Gas prices are down, reserves are woefully underexploited, and the future will almost inevitably bring shortages unless we do what must be done now. The House has already passed its version of a bill that would end price controls in January, 1993. The Senate is addressing a similar

bill that could easily be reconciled with the House version.

Deregulating natural gas is no panacea. Our formidable oil and gas trade deficit and environmental problems will remain. And it may already be too late to avoid gas shortages in the short run. But deregulation would ease all the problems. Much has been made of the temporary oversupply that the country has enjoyed for a decade, but that "bubble" is fast evaporating. Many believe it will end during the heating season or soon after that. But once the shortage hits, the knee-jerk public outcry for the government to do something may slam the door shut on deregulation forever.

If so, the losers would be the American public. The gas seems inescapable: Prices freed to rise in anticipation of a shortage would spur more exploration for gas, which the nation may well have in far greater abundance than it needs. Higher prices for producers would not translate penny for penny into higher prices for consumers. A 25% increase in wellhead prices would add less than 10% to the delivered price of gas in the Northeast. But that would help curb the artificially bloated consumption. In the end, higher prices would forestall another bout of the costly cutbacks and cutoffs of natural gas that shut down factories in the 1970s.

Few calls for deregulation during the recent era of deregulation have made more sense than those to end price controls on natural gas. Let's heed those calls now.

MAGGIE MAY BE PUSHING THATCHERISM TOO HARD

May 4 marks the anniversary of a remarkable day in power for a remarkable woman. Margaret Thatcher's accomplishments in restoring confidence in her country and reestablishing Britain as a respectable power cannot be underestimated. She clearly is the country's most significant postwar politician since Clement R. Attlee and is today Europe's most forceful leader.

The Thatcher revolution continues. Her energy is focused on remaking the social and cultural map of Britain. But this time she may be taking it too far. In some ways she is applying more or less "American" prescriptions to ailments Britain, extending the market into such new territories as health care, law, and education. Her central objective is to allow competition to declare the winners and losers.

But in doing so, she's attacking cherished traditions and government institutions on which many Britons have come to depend. The response from some of her staunchest friends in the Conservative Party has been an angry "No."

Many critics contend Thatcher is propelled by economic dogmatism that knows no bounds. Indeed, some of her proposals, especially the reform of the health-care system, are poorly thought out. What's more, with the economy showing signs of coming unstuck, there's the question of whether this is the time to continue the push for social overhaul.

Is Britain ready for this—or will the Iron Lady have to bend? It would be a shame if her doctrinal zeal stirred such opposition that Thatcherism came unraveled. She is a shrewd politician. Her challenge now is to gauge how far she can push without tearing the country apart.

THE NEXT STEP.





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May 8

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BusinessWeek

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MIRACLE OR MISTAKE? FUSION IN A BOTTLE

A SCIENTIFIC
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STORY
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We're very proud of our association with Dale Carnegie®, of the number of our people who have gone through the training. When a new employee comes to us, the first thing we look for is the right attitude, because success begins with attitude. Second, once we find someone with a good attitude, we train them in the Stew Leonard way of doing things, and that includes not only training in their specific job, but an understanding of our traditions. Then they go through Dale Carnegie Training®, because, if you want to start a fire, you've got to strike a match, and that's what Dale Carnegie® does for us. It lights the fire of their enthusiasm, of their inspiration. It makes them want to become themselves at their very best. Then when they're ready, we encourage them to apply everything they've learned. And, we make it all fun. We call it WOW. We put in the WOW so it stops being work and starts being fun.

People from other food stores around the country often come through my store looking for the secret of our success. They look at everything, at the machinery and layout and products carried, but the real secret of success at Stew Leonard's is our people.

In my wildest imagination, I would not have predicted

15 years ago that I would be the owner of a business now doing \$100 million a year. But it has happened, and it has happened because I was fortunate enough in the beginning to go through Dale Carnegie Training®, training that taught me how to overcome my natural lack of self-confidence and how to believe in myself.

I was only 20, fresh out of college, when it fell to me to run our small family dairy business. I was the youngest in a family of seven and all the employees here were twice my age. I was intimidated, but I wanted to succeed. I took the Dale Carnegie Course® to learn to work with people and got so very much more from the Course. I learned that I could become a leader. I learned about human relations and to respect the dignity of other people. I gained the confidence I needed to manage and build my company. It gave me the understanding that success depends on other people sharing your philosophy and inspiration and working together toward a common goal.

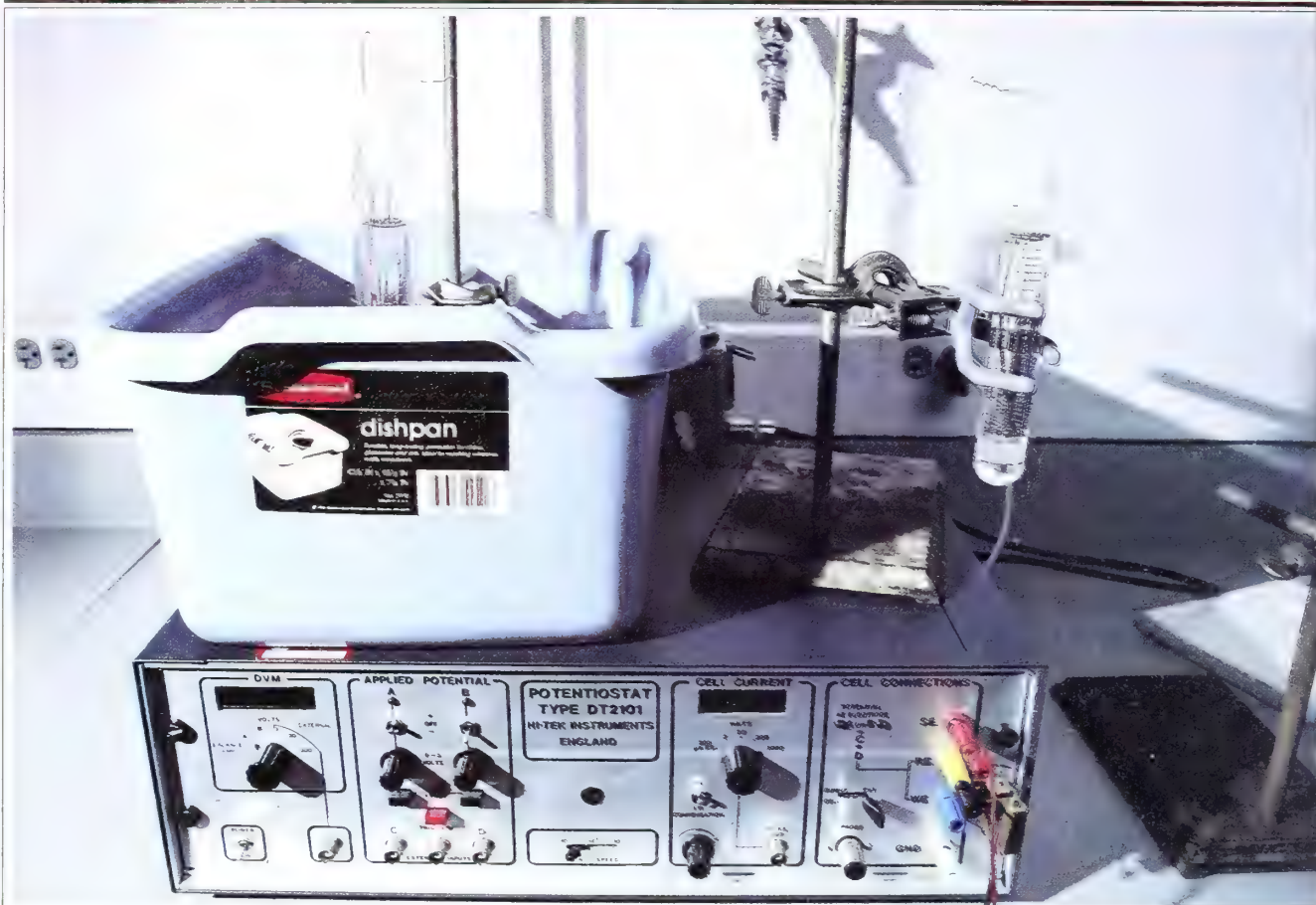
If you want to grow, if you want to become more successful, you have to learn how to get along well with other people and how to motivate them. It sure helps to learn how to speak in front of people, too, because, if you've got 630 people working for you, like I have, there's no way to inspire them without getting up in front of the room and talking. And there's no place in the world better to learn all this than in a Dale Carnegie Course®."

To find out more about Dale Carnegie Training® and how it can benefit you and your people, ask for a copy of our quick-reading booklet that describes the benefits and objectives of Dale Carnegie Courses®. Call toll-free 800 231-5800. Or write to the address below.



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NOT AS SIMPLE AS IT LOOKS: THE UTAH TEAM'S HOMESPUN FUSION SETUP RAISED HOPES OF QUICK CONFIRMATION—WHICH WERE DASHED

Cover Story

100 FUSION IN A BOTTLE

Did an experiment by B. Stanley Pons and Martin Fleischmann produce four times as much energy as they put in? Without producing fatal levels of radiation? If so, how? And why hasn't anyone been able to duplicate their results? Amid news of withheld details and a lack of control tests, frustration among scientists is building

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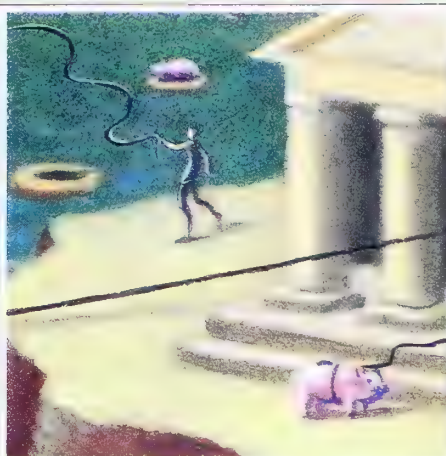
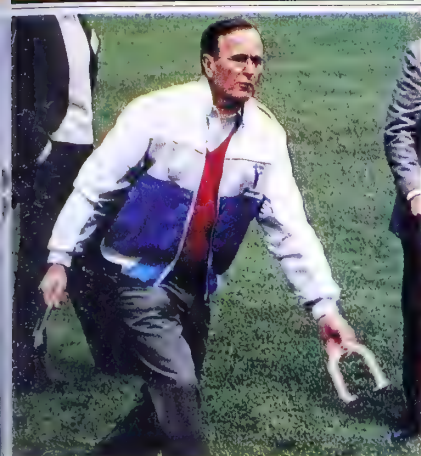
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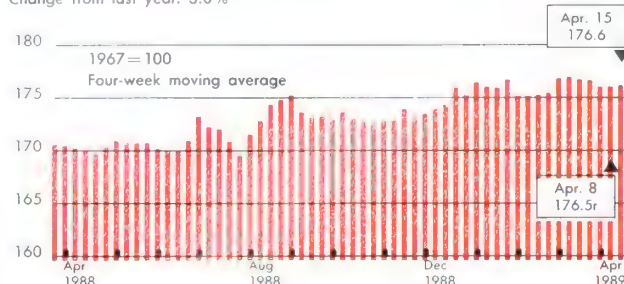
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BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 3.0%

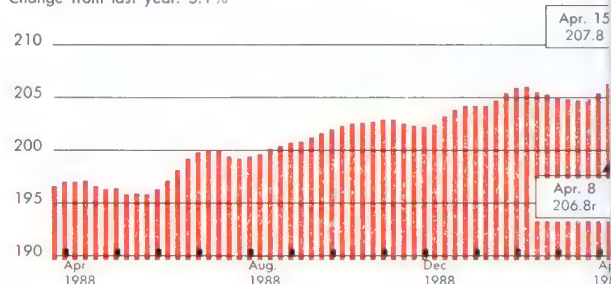


The production index edged up slightly during the week ended Apr. 15. On a seasonally adjusted basis, only output of coal and lumber increased. Offsetting those gains were drops in the production of trucks, autos, paperboard, paper, rail-freight traffic, steel, and crude-oil refining. Output of electric power was unchanged from the previous week. Before calculation of the four-week moving average, the index dropped to 176.9 from 177.7 in the prior week.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.5%
Change from last year: 5.1%



The leading index increased for the week ended Apr. 15. The index now stands at its highest level since August, 1987, when stock prices peaked. Contributing to the latest week's increase were higher stock prices, slightly lower bond yields, and fast growth rates for materials prices, real estate loans, and M2. On the negative side the number of business failures rose. Prior to calculation of the four-week moving average, the index also increased, to 209 from 208.2 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/22) thous. of net tons	2,055	2,053 #	4.2
AUTOS (4/22) units	161,119	160,476r #	0.7
TRUCKS (4/22) units	94,032	87,343r #	7.8
ELECTRIC POWER (4/22) millions of kilowatt-hours	49,205	50,653 #	3.2
CRUDE-OIL REFINING (4/22) thous. of bbl./day	13,002	13,025r #	-1.4
COAL (4/15) thous. of net tons	19,061 #	18,791	4.7
PAPERBOARD (4/15) thous. of tons	743.5 #	756.6r	1.7
PAPER (4/15) thous. of tons	742.0 #	752.0r	-1.5
LUMBER (4/15) millions of ft.	486.9 #	485.3	-4.6
RAIL FREIGHT (4/15) billions of ton-miles	20.0 #	19.7	3.6

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/26)	132	132	125
GERMAN MARK (4/26)	1.88	1.86	1.67
BRITISH POUND (4/26)	1.69	1.71	1.89
FRENCH FRANC (4/26)	6.35	6.30	5.67
CANADIAN DOLLAR (4/26)	1.19	1.19	1.23
SWISS FRANC (4/26)	1.66	1.64	1.39
MEXICAN PESO (4/26) ³	2,425	2,420	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/26) \$/troy oz.	383.850	383.900	-14.8
STEEL SCRAP (4/25) #1 heavy, \$/ton	116.50	116.50	-1.3
FOODSTUFFS (4/24) index, 1967=100	224.6	226.1	2.9
COPPER (4/22) c/lb.	147.5	146.3	46.6
ALUMINUM (4/22) c/lb.	98.0	97.0	-7.5
WHEAT (4/22) #2 hard, \$/bu.	4.51	4.40	41.8
COTTON (4/22) strict low middling 1-1/16 in., c/lb.	60.95	61.68	1.2

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/21) S&P 500	306.14	298.47	17.8
CORPORATE BOND YIELD, Aaa (4/21)	9.80%	9.80%	7.1
INDUSTRIAL MATERIALS PRICES (4/21)	106.0	105.6	1.1
BUSINESS FAILURES (4/14)	256	236	-18.2
REAL ESTATE LOANS (4/12) billions	\$319.3	\$318.4r	19.4
MONEY SUPPLY, M2 (4/10) billions	\$3,095.3	\$3,091.0r	4.1
INITIAL CLAIMS, UNEMPLOYMENT (4/8) thous.	320	318	9.1

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCIR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUDGET SURPLUS OR DEFICIT (-) (Mar.) millions	-\$35,779	-\$27,872	-22.1
ORDERS FOR DURABLE GOODS: MFG. (Mar.) billions	\$124.9	\$123.9r	14.1
IMPORTS (Feb.) millions	\$40,964	\$38,992r	2.1
EXPORTS (Feb.) millions	\$28,905	\$28,747	19.1

Sources: Treasury Dept., Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/10)	\$781.5	\$781.0r	3.1
BANKS' BUSINESS LOANS (4/12)	312.0	313.3	1.1
FREE RESERVES (4/19)	-323	804r	1.1
NONFINANCIAL COMMERCIAL PAPER (4/12)	112.3	112.3	2.4

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (4/25)	9.85%	9.71%	6.8%
PRIME (4/26)	11.50	11.50	8.5%
COMMERCIAL PAPER 3-MONTH (4/25)	9.76	9.73	6.92
CERTIFICATES OF DEPOSIT 3-MONTH (4/26)	9.80	9.80	6.95
EURODOLLAR 3-MONTH (4/19)	10.15	10.14	7.08

Sources: Federal Reserve Board, First Boston

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How you look at the world

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BIG OR SMALL, IT'S LEADERSHIP THAT COUNTS

"Is your company too big?" (Cover Story, Mar. 27) raises some challenging issues for business leaders. The gut one: Can a company's leadership manage effectively in an ambiguous environment? Executives tend to see things in black or white. That is, the business must be big or small, centralized or decentralized. The future demands both at the same time.

Business executives need to step back and focus on managing the context, and let others manage the content. Information technology is one of the great facilitators in successfully managing the context and pushing the content out into decentralized and innovative structures. Without a mind-set shift by the leadership, however, the addition of technology only serves to add to corporate overhead.

Dudley P. Cooke
President
Executive Insight Group Inc.
Bryn Mawr, Pa.

Joseph Schumpeter would be horrified at being cast as an apologist for large corporations—given today's slow-moving, dim-witted, risk-averse behemoths. In fact, Schumpeter was, and is, the patron economist of the entrepreneur. His writings pioneered the recognition that innovation and risk-taking are what makes capitalism work.

Schumpeter's point in the 1942 work quoted [in your story] was that it is not really the efficiencies resulting from price, quality, and marketing competition between existing firms in an industry that are important for economic growth. Rather, he wrote, it is "competition from the new commodity, the new technology, the new source of supply, [and] the new type of organization" that "in the long run expands output and brings down prices."

Today large organizations are nothing new—so they do not inherently lead to material progress. It is the smaller organizations, which have no vested interest in the status quo, that are leveraging new commodities (scrap in minimills vs. U.S. Steel), new technologies (microprocessors in PCs vs. IBM), new sources of supply (Pacific Rim autos vs. GM), and new types of organizations (long-tenure-only companies vs. AT&T) to

come the economic engines of tomorrow.

What follows from Schumpeter's insights is that we must reorient our public policies to liberally facilitate capitalism's tumultuous "process of creative destruction," rather than favoring entrenched corporate giants if we are to successfully compete in the global marketplace over the long run.

Sid Nelson
Tucson, Ariz.

Thomas J. Peters' statement: "One strength is The Limited, Nordstrom, and Wal-Mart knocking off J.C. Penney and Sears," is not accurate.

Five years ago, J.C. Penney recognized that the mass-merchandising world had changed. They dumped their textile and battery centers, stopped selling major appliances, dropped piece goods and sewing machines, sporting goods, hardware and paint, and entered into a major program of merchandise and store upgrading.

Now they are positioned above to fight that Sears, Kmart, Wal-Mart, and the major discount chains are engaged in. Their data processing system is a major processor of oil company credit card slips, and the communications system is used by many companies for teleconferencing. They moved out of high-cost New York to lower-rent-and-labor-cost Dallas.

The result? When my wife joined J.C. Penney 15 years ago, Sears stock sold for twice as much as Penney (40 vs. 20). Today, after a two-for-one split seven years ago, Penney is valued at an equivalent



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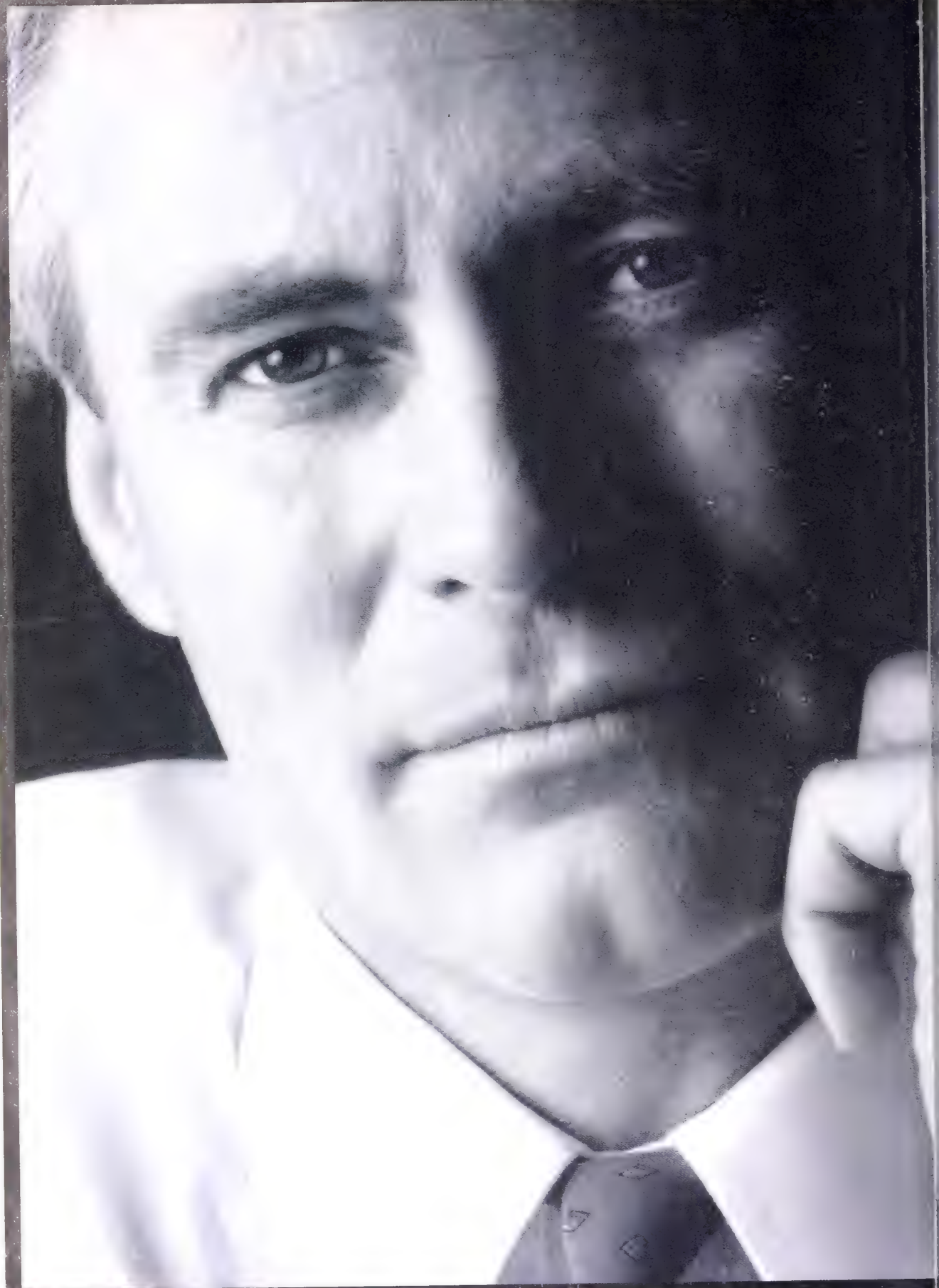
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Readers Report

alent value of 104, and Sears is still hanging around 42.

Frederick Dunn
Clearwater, Fla.

WHY THE PENTAGON WANTS TO FLY WITH JAPAN

Your story on the FSX problem, "Can the Pentagon keep shielding Japan?" (International Business, Mar. 27), was a disappointment. Why would the Pentagon, against the wishes of Commerce Secretary Robert A. Mosbacher and U. S. Trade Representative Carla A. Hills, want to persuade Tokyo to jointly develop the new-generation fighter aircraft? There are two key reasons: First, the Pentagon is seeking Japanese technology on new carbon fibers for wings—a must to commercialize supersonic flight; the superior radar technology that the Japanese have would be another plus. Second, the Japanese contractors have been trying to derail this compromise from the start. They want it to be an all-Japan product. In that way, their contractors can take the lion's share of the business well into the 21st century.

The Pentagon has persuaded the government in Tokyo to drag the business

community to the bargaining table. Mr. Mosbacher and Ms. Hills should do an immediate about-face and side with the Pentagon. Their job is to defend our interests, not Japan's. A common front makes for more fruitful discussions.

Robert W. Shatz
Los Angeles

WHO'S TO BLAME FOR THE LATIN DEBT MESS?

Paul Craig Roberts' column "No relief on Latin debt—without World Bank reform" (Economic Viewpoint, Mar. 6) really comes to the meat of the problem. The economic stagnation in Latin America today is largely due to the lack of an adequate infrastructure—and that is largely due to the arrogance and naïveté of the World Bank, Inter-American Development Bank, and other international lending institutions. It's no wonder that we who live in Latin America suffer from inadequate water, electricity, and telephone service when these utilities are provided by organizations run by incompetent and frequently corrupt public officials.

I have been involved in many World Bank-financed projects and watched

them go sour because of the failure of the bank's representatives to deal with the inept and corrupt public officials who administer the public utility sector. On one occasion, I asked a World Bank official visiting Nicaragua about the possibility of diversion of large amounts of money in that country after the 1985 earthquake. His response was that this was a police matter and of no concern to the bank. Most of us then knew that the police, the public sector, and just about everything else in Nicaragua were under the direction of one man.

Aside from the outright corruption, the World Bank should have learned long ago that no amount of capital can substitute for adequate doses of management and accountability. The failure of the bank to comprehend this basic maxim is not surprising when one considers that it and its sister institutions are staffed by individuals who were schooled as public sector bureaucrats.

James C. Warren
Guatemala City, Guatemala

If it is capitalism we want from our Latin neighbors, we should set the example by insisting that the U. S. bank that unwisely extended credit to the

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Latin American customers far beyond prudent limits bear the loss themselves. The U.S. banks turn to the U.S. taxpayer to help bail them out of their bad loans, we had all better talk about capitalism and free enterprise in somewhat muted terms.

C. Victor Raiser II
Washington

MEX' CREDIT-CARD BUSINESS IS IN THE PINK

Your article on Lou Gerstner ("Lou Gerstner is girding for a long, hard campaign," Top of the News, Mar. 27) included a sidebar headed "RJR's gain could mean pain for AmEx." In it you stated that loss reserves in American Express' card business were up by 31% in 1988.

Our 1988 annual report points out that the provision for credit losses did in fact increase by 31%, but that the increase was primarily a result of higher charge-card volume and expanded cardmember lending.

By neglecting to mention these factors, you are suggesting that we are facing credit problems in our card business. In fact, we are experiencing significant, high-quality growth in our core card product as well as in our consumer

CORRECTIONS & CLARIFICATIONS

"The North American shakeout arrives ahead of schedule" (International Business, Apr. 17) said Telenet Communications Corp. is expected soon to announce a sale of telephone switches in Canada. The anticipated deal is actually for packet data switches and related equipment.

lending business, an area of great strategic emphasis for us.

Other credit performance indicators, not mentioned, amply demonstrate that our cardmembers are performing better than ever. In 1988 we realized losses averaging 0.66% (66 basis points) of cardmember receivables, down from 0.68% in 1987 and 0.77% in 1986. In addition, the average life of our cardmember receivables has steadily declined over the same period: 42.5 days in 1988 vs. 44.6 days in 1987 and 45.1 days in 1986. These indicators certainly do not paint a picture of a business confronting "long-term worries."

I might add that while Mr. Gerstner was the chief executive officer of our Travel Related Services subsidiary during these years, the policies and procedures that underlie this outstanding record were crafted by the existing TRS

management group, led by Aldo Papone and implemented by the many TRS employees involved in our credit and operations areas.

Craig A. Stroom
Vice-President
Investor Relations
American Express Co.
New York

IT MAY BE FUNNY, BUT IT'S NOT HIS JOKE

In your recent article "Comedy clubs can be knockouts" (Personal Business, Mar. 27) I was quoted with a joke about Utah.

Although I have many good jokes to choose from, including: "I smoked a clove cigarette and got an urge to ram my head into a cooked ham," the one about Utah is not mine. It was written and performed by Denver comic Vince Curran, and he's the one who should receive the credit.

Jim Truman
Nederland, Colo.

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THE ENIGMA OF JAPANESE POWER

By Karel van Wolferen

Alfred A. Knopf • 496pp • \$24.95

WHO CALLS THE SHOTS IN JAPAN? NOBODY

If you wonder how Japan's Liberal Democrats can stay in power as the Recruit Co. bribery scandal topples the Prime Minister, author Karel van Wolferen has an intriguing answer: The LDP doesn't actually hold power in Japan. In fact, he says, nobody does.

In *The Enigma of Japanese Power*, van Wolferen argues that parliamentary democracy in the world's second-largest economy is a thin veneer. Despite regular elections, Japanese voters have no real choice of leaders or policies. The LDP has held sway since 1955, but that's only part of the problem. Japanese voters are, in effect, servants of an entrenched "System" dedicated only to self-preservation.

Van Wolferen, a correspondent for the Netherlands' *NCR Handelsblad* and a 25-year resident of Japan, documents with

passion and intelligence how power is deployed. Oblique but strict rules dictate the relationships among competing elites of politicians, bureaucrats, and executives. He shows how the national policy of expansion at the expense of foreign competitors evolved over decades, when Japan was building its industrial powerhouse. The policy is dangerously out of date, but nobody in Japan has the authority to alter it.

To support his case, first outlined in an article for *Foreign Affairs* magazine two years ago, van Wolferen marshals fantastic detail, drawing on Japanese sources rarely tapped by other Western commentators. He highlights the scope of old-boy networks by tallying the Tokyo University graduates in key ministry and LDP posts. To illustrate Prime Minister Noboru Takeshita's personal

dependence on the construction industry, he draws a family tree of relatives married into major construction concerns.

Instead of the harmony many Westerners associate with Japanese government, he uncovers a host of warring factions with a power vacuum at the center. For Japan's institutions, the lack of "a formula for agreeing to disagree" lets conflicts spin out of control. Brawls in the Diet were so common during the 1950s that stenographers petitioned for protection, and the recent tax reform debates were punctuated by violence.

For the country's frustrated trading partners, there is a message: Japanese politicians renege on promises to open markets and boost imports not because they are devious but because they have no means to deliver. The U.S. is partly to blame. Washington's lenient and inconsistent trade stance since the end of World War II has reinforced Tokyo's tendency to steam ahead with no one at the helm who will uphold principles or take responsibility for failure. Until Americans grasp the true shape of Japanese politics, the author warns, there's little hope of progress on the trade front and great risk of rising belligerence.

Van Wolferen is an engaging narra-



or, whether he is etching the emasculation of Japan's labor unions or the casual physical abuse with which police extract confessions from criminal suspects. And while others have described the stifling of intellectual debate, the persecution of small businesses, and the poison of money politics, van Wolferen's account penetrates deeper, even though it was written before the Rei-ut scandal.

The only serious flaws are his penchant for hyperbole and the unrealistically dark picture he paints of life in Japan. Middle-class workers emerge as a de-pressed mass, stripped of individuality by the education system, bullied by their companies, and hoodwinked by the media. Van Wolferen's metaphor is of a horticulturist who creates a chemical poison to stunt his roses. This kind of grim overstatement, while poetic, does nothing to advance the argument.

Americans may also question how



SCUFFLING AT THE DIET: BRAWLS AMONG LEGISLATORS SOMETIMES PUNCTUATE DEBATE

helpful his analysis of Japanese trade policy is. You don't need to posit a "stateless nation," as the author calls it, to explain why Japanese politicians back down on promises. Intransigence on trade has brought Japan prosperity, and the policy has more popular support than van Wolferen admits.

One example of overstatement is van Wolferen's contention that the Japanese don't realize that they would benefit from market liberalization. In fact, many

educated Japanese understand that it's a trade-off. Yes, imports could be cheaper. On the other hand, whole industries owe their survival to protectionism. High prices at home have subsidized exporters. Circuitous distribution channels—targeted as trade barriers by the U.S.—have provided jobs. In short, the Japanese may be getting what they want from their trade representatives.

Furthermore, after an excellent analysis of power in Japan, van

Wolferen comes up short on recommendations. All he can suggest—cynically, one hopes—is that Tokyo University be abolished and that more Japanese become lawyers, so that victims of the System can litigate to protect their rights. His pessimistic conclusion: Making Japan a true constitutionalist state "would require realignments of power akin to those of a genuine revolution."

Enigma is neither an exercise in Japan-bashing nor a blueprint for Wash-



A suite at the Valadon Hotel as interpreted by Deborah Roundtree, Los Angeles, 1989

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Books

gton's dealings with Tokyo. Instead, in Wolferen has written a readable and controversial exposé. In describing Japan's government as a suffocating tangle of political arrangements with no accountability at the core, his book is using a furor in some Japanese circles. And it could have profound implications for Western policymakers as well.

BY NEIL GROSS

Tokyo Correspondent Gross has lived in Japan for 10 years.

BOOK BRIEFS

GOLDWYN: A BIOGRAPHY

A. Scott Berg
Hardcover • 580pp • \$24.95

Hollywood today is full of one-picture producers with flashy clothes and cars, but in the history of the movie industry, true moguls have been few and far between. By any measure, Samuel Goldwyn was the real thing. Born Schmuel Gelbfisz in Warsaw, Goldwyn emigrated illegally to the U.S. in 1898 and became a glovemaker. At the time he died in 1974 at the age of 76, his name was almost synonymous with Hollywood. He made one of its first feature-length films, *The Squaw Man*, and in a 43-year career produced such classics as *Wuthering Heights* and *The Little Foxes*. His discoveries included Donald Crisp, David Niven, and Loretta Young. He worked with Cecil B. DeMille and feuded with Louis B. Mayer. In A. Scott Berg's brilliant biography, Goldwyn's ascendance and decline mirror Hollywood's. The book traces Goldwyn's often-rocky path to a position of formidable influence. He could be a raucous bully, firing or berating Hollywood's finest writers and directors. Berg also shows how television changed Hollywood and left Goldwyn's movie formula—high budgets, big stars, and meticulous direction—largely in the dust. Berg takes readers into the Beverly Hills mansion where Goldwyn, who eschewed publicity, was renowned for his lavish parties. And he shares the origins of famous Goldwynisms, from "Include me out" to "He's biting the hand of the goose who laid the golden egg." Goldwyn's son, Samuel Jr., asked Berg to be his father's biographer 10 years ago, after Berg won the American Book Award for his work on editor Max Perkins. The author had access to years' worth of Goldwyn's personal papers, and Samuel Jr. introduced him to scores of Goldwyn intimates, famous and unknown, who shared their reminiscences. Goldwyn assembles them into a star-quality epic.

BY RONALD GROVER

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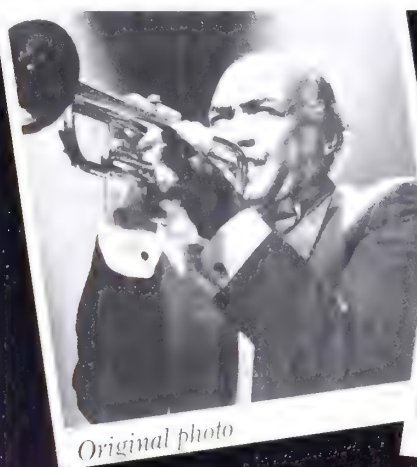
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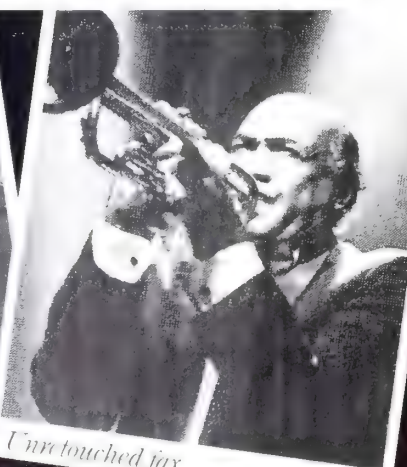
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SURE, SPEND MORE ON CHILD CARE. BUT SPEND WISELY

BY GARY S. BECKER



President Bush's tax-credit proposal would help poor parents, but not necessarily their kids—and other ideas being debated would lavish aid on families that don't need it

Child care has become a hot political issue. Washington is involved—and should be. The public has a clear interest in the care of the nation's children—especially poor or neglected youngsters.

Unfortunately, some of the proposals would help parents at the expense of children, and some wouldn't help those who need help the most. The many proposals for improving child care include President Bush's tax credit for low-income families with young children, Representative Patricia Schroeder's (D-Colo.) mandatory job leaves for parents with newborn or ill children, part-time mommy tracks at companies, and subsidizing child care—especially for the children of working women.

There is good reason to be concerned about what has been happening to children in the U.S. during the past couple of decades. Scores on both the verbal and mathematics parts of the Scholastic Aptitude Tests declined sharply during the 1960s and 1970s, although they have increased a little during the 1980s. The suicide rate among teenagers and young adults soared during the 1960s and 1970s, while the rate for all adults remained stable.

The number of children growing up with a single parent has multiplied as the divorce rate rocketed, and now almost 20% of America's families are headed by working mothers, the majority with low incomes. The incidence of pregnant, unmarried high school students has jumped, drug use has infected every community, and the barrage of other disturbing statistics seems endless. The same trends, although less dramatic, are found in Britain, Sweden, and other Western European countries.

PRECIOUS LITTLE. President Bush's tax credit would award poor families a tax refund of as much as \$1,000 per child under age four, but this only helps the children to the degree that the parents spend part of that additional income on the children. However, the children will see precious little more from parents who care mainly about themselves. Unfortunately, because the President's proposal ensures child support to divorced mothers, it could also encourage some poor families to split up.

Moreover, what happened during the 1960s and 1970s shows that merely throwing more public money at the child-care problem is not enough. The situation deteriorated markedly during those decades despite a rapid growth in federal, state, and local spending on children. It seems clear that we need to spend more resources on child care. But in my opinion, any increased public spending on such programs must be tar-

geted to specified purposes that are likely to improve skills, training, mental health, values, and other human capital. This is the best way to reduce the chances that spending is not diverted to benefit other groups.

Probably the best way to ensure the most bang for the public buck would be some sort of system of vouchers that could be redeemed by poor families for those activities that improve human capital. For example, medical care, counseling services, and Head Start programs for children are promising candidates for a voucher program.

If Bush's tax-credit scheme is flawed, so are the other proposals for child care. Most help middle-class and richer families as well as poor families, or help parents at the expense of children. For example, government subsidies to child care facilities favor all families with working mothers, not just poor families. No doubt children in some families with working mothers would gain from such subsidies because they would be placed in better care facilities. Clearly, the program is of no help when mothers stay home, for whatever reason, thus remaining outside the child-care program.

ABSENT MOM. Subsidies for child care encourage more mothers to work. Sweden has adopted practically all of the programs currently being mentioned in the U.S., including mandatory paid leave for parents with young children, subsidized child-care facilities, separate taxation of the earnings of husbands and wives, and encouragement of part-time work by mothers. Sweden's experience shows that these programs have a huge effect on the labor-force participation of married women: More than 80% of Swedish married women with young children work, compared with 60% of American women and less than 40% of West German women. Labor-force participation rates of women in Sweden and Germany diverged rapidly after Sweden introduced these programs and Germany failed to implement them.

But there is a real question whether encouraging mothers to work is good for the children. Many psychiatrists and other professionals in the field of child care argue that young children often need their mothers' care, and a fierce debate is raging on whether many are hurt by their mothers' absence.

Public initiatives are clearly needed to safeguard the nation's most valuable resource—its children. However, Congress and the President should make sure that any new legislation is really aimed at helping children, not simply improving the lifestyle of middle-class working women and other groups with sizable political clout.

GARY S. BECKER IS UNIVERSITY PROFESSOR OF ECONOMICS AND SOCIOLOGY AT THE UNIVERSITY OF CHICAGO

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BY GENE KORETZ

THIS CONTRARIAN STRATEGY WORKS—WEEK IN, WEEK OUT

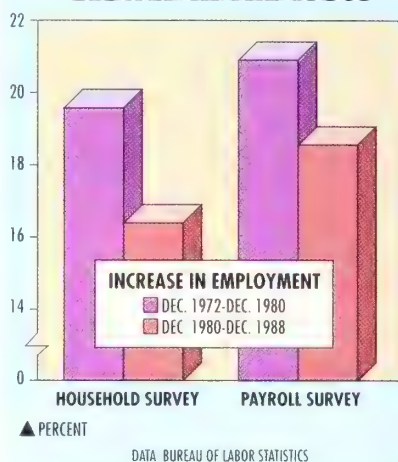
Over the years, economists have spied a few patterns in stock prices that apparently contradict the efficient-markets theory, which says only insiders can consistently beat the market. One of the more intriguing, which has apparently made big bucks for several institutional traders in recent years, is described in a new study by economist Bruce N. Lehmann of Columbia University's business school.

Essentially, Lehmann notes that stock prices that underperform the stock market average during one week tend to rise in price during the following week, while those that outperform the market average tend to fall. To take advantage of this anomaly, he devised an investment strategy whereby he bought all the previous week's "losers" or underperformers on the two major exchanges and held them for a week before selling them. At the same time, he sold short all the previous week's "winners." He also weighted his weekly portfolios by investing more heavily in the prior week's biggest "losers" and "winners."

Using a computer to track stock performances from 1962 through 1987, Lehmann found that his strategy of buying losers and selling winners consistently produced gross annual profits of about 60% to 90% a year. While transaction costs would have eaten up those profits for individual investors, Lehmann calculates that large institutions with a cost of 0.1% to 0.2% per transaction would have gleaned net profits of at least 30% to 50% a year. Indeed, he notes that in recent years, several institutional investors, such as the College Retirement Equity Fund, have been using similar contrarian strategies.

What's behind the pattern Lehmann studied? His own theory is that significant stock trades cause prices to temporarily overshoot fair value because the market lacks perfect liquidity—that is, initiators of trades must accept less or pay more than a stock is really worth to attract buyers or sellers. But once that happens, prices tend to move back closer to true value. And by systematically supplying liquidity to enhance that process, institutions with low transaction costs can turn a handsome profit. "Of course, if enough institutions follow the strategy," adds Lehmann, "profit opportunities will dwindle."

JOB GROWTH ACTUALLY SLOWED IN THE 1980s



THE REAGAN JOB MACHINE: IS IT A MYTH?

Claims that Reaganomics spurred an unparalleled expansion in employment are highly exaggerated, says Leonard Lempert, publisher of *Statistical Indicator Reports*, a weekly review of economic indicators. "In actuality," he says, "the so-called employment explosion of the eight Reagan years represented a slowdown in historical trends."

The statistics bear him out. According to the Labor Dept.'s household survey, civilian employment jumped by 16.4% from December, 1980, to December, 1988, compared with a huge 19.5% increase over the previous eight years. (In both periods, actual jobs rose by about 16.3 million.) Similarly, growth in nonagricultural employment as measured by Labor's payroll survey fell from 20.8% in the earlier eight-year period to 18.5% in the Reagan years (chart).

The crucial factor underlying long-term employment trends, Lempert believes, has been a sharp decline in the growth of the labor force, which climbed by 19.4 million people, or 22.1%, from 1972 through 1980, and by only 15.2 million, or 14.2%, in the next eight years. "Whatever economic policies are pursued," he says, "the slackening in labor-force growth, which reflects ongoing demographic trends, indicates that employment gains will continue to slow over the next decade." Indeed, the current low unemployment rate suggests that attempts to sustain the pace of job growth at this juncture would fan the flames of inflation far more than they would enhance employment.

THE VALDEZ SPILL IS DOUBLE TROUBLE FOR INFLATION

Inflation is on a roll, and the surge in oil prices following the Alaskan oil spill will compound the problem for at least several months, says economist Bruce Steinberg of Merrill Lynch Capital Markets. He estimates that recent sharp gasoline price hikes will add 0.2 to 0.3 of a percentage point to the April consumer price index, which he thinks could come in as high as 0.8%—the biggest jump in more than five years.

The problem is that it's not just oil that is heating up inflation. Although overall consumer prices just registered their most rapid year-to-year rise since October, 1982, the acceleration even shows up in the CPI excluding food and energy, which posted a 5.2% annual rate in the first quarter of this year compared with 4.7% in the previous quarter.

Similarly, oil prices aren't the only source of upward pressure on the producer price index. Steinberg notes that prices for a wide range of crude and intermediate materials other than food and energy picked up steam in the March producer price index report. And the Commodity Research Bureau's industrial materials index, which doesn't include petroleum products, is running 13% over its level in April of last year.

A SLOWDOWN MAY NOT BRING INTEREST RATES DOWN RIGHT AWAY

To hear financial-market bulls tell it, peaking of interest rates could be almost at hand. The reason: Inflationary pressures will abate once the long-predicted economic slowdown begins, allowing the Federal Reserve Board to shift policy quickly toward monetary ease. But economist Kenneth T. Mayland of Society National Bank in Cleveland thinks the bulls could be disappointed. "Past business cycles have repeatedly shown," he says, "that it takes considerable time for economic sluggishness to result in actual reductions in inflation."

Mayland notes that the lags between the onsets of the 1969-70, 1973-75, and 1980 recessions and subsequent peaks in inflation ranged between 5 and 11 months. "Even if we slip into recession," he warns, "it may be many months before the Fed feels the inflationary outlook permits a turn to monetary ease."



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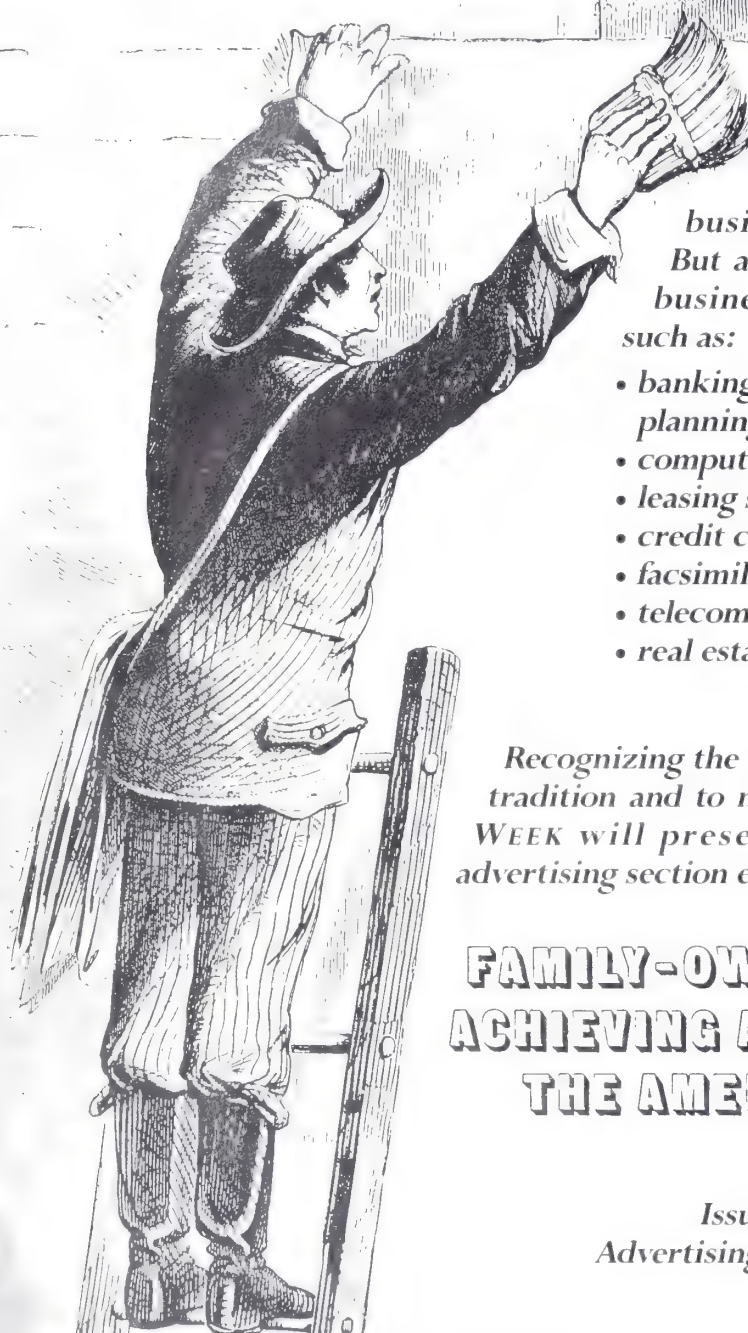
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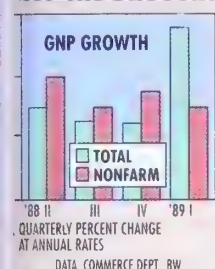
BusinessWeek

THE ECONOMY MUST KEEP ITS SPEED DOWN TO SWERVE AWAY FROM INFLATION

Signs of a cooler economy abounded in the first quarter. But if upward pressures on inflation and interest rates are going to abate, the temperature will also have to stay down in the second quarter. Right now, that's not a sure thing.

The economy's real gross national product, the broadest measure of growth, rose 5.5% last quarter. The Commerce Dept.'s estimate of the postdrought rebound in farm output accounted for 2.5 percentage points of the gain, but that still left a healthy 3% growth rate for the nonfarm economy (chart).

THE ECONOMY SHAKES OFF THE DROUGHT



Growth got a big boost from the foreign trade sector. The price-adjusted trade deficit of goods and services narrowed sharply in the first quarter, as exports grew faster than imports did. That accounted for about one percentage point of the overall GNP growth.

Investment in plants and equipment also added strongly to the economy in the first

quarter. Inflation-adjusted spending on nonresidential structures rose by a 7.9% annual rate, and business equipment investment was up 10.2%. Those gains won't be repeated later in the year. Most surveys of capital spending plans indicate plant and equipment investment will be concentrated in the first half of 1989.

Moderate inventory accumulation and slower consumer spending were the big reasons that the nonfarm economy didn't grow faster last quarter. Consumers increased spending at just a 1.3% annual rate, compared with a 3.5% pace in the fourth quarter. Dismal car sales were the cause. Meanwhile, nonfarm business inventories in the first quarter expanded at about the same pace as they did in the fourth quarter of last year.

GROWTH COULD SPEED UP

Both these sectors could positively influence growth this quarter, and that would keep pressures building on prices. Domestically made car sales have rebounded so

far in April, suggesting that consumer spending is on an upswing this quarter. New cars sold at a 7.7 million annual rate in mid-April, following a 7.5 million pace earlier in the month. That's quite a jump from the 6.9 million annual pace in the first quarter.

The April sales boost—the result of heavy incentive programs—should help auto dealers with their current inventory problems. And with other inventories at low

levels, an increase in overall demand means a boost to factory output this quarter.

WAGES WILL KEEP THE HEAT ON PRICES

But if the economy speeds up, so will price increases. The GNP report made one thing clear: Inflation started off at a higher level in 1989. Commerce's fixed-weight price index, a broader gauge of inflation than either consumer or producer prices, rose at a 5% annual rate in the first quarter, up from 4.2% in the fourth. Half of that gain came from pay raises to government employees—a factor that won't be repeated this quarter.

But wages, and other labor costs, will keep the heat under prices for the rest of the year. Employment costs for all private workers in the first quarter rose by 4.6% over the same quarter last year, compared with a faster 4.9% yearly rate in the fourth quarter, according to the Labor Dept.'s latest set of employment cost indexes.

But despite that slower pace, the trend in labor costs is still up. Prior to last quarter, compensation increases had accelerated in each of the previous six quarters. Since labor costs account for three-quarters of all business expenses, that puts companies under increasing pressure to raise prices.

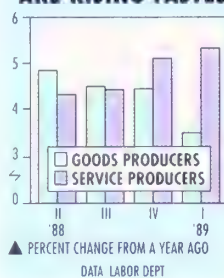
The slower pace last quarter was due to a smaller rise in benefits, which account for about one-fourth of all labor costs. Benefits increased 5.4%, year-over-year, compared with 6.8% at the end of 1988.

Wages, on the other hand, accelerated last quarter. They rose by 4.2%, year-over-year—the fastest gain since mid-1985. A steep, and likely temporary, increase in commissions earned by sales workers caused much of that rise. But even excluding sales, wage gains picked up last period, to a 3.9% yearly rate, from 3.7% in the fourth quarter.

Compensation gains in the service sector continued to outpace increases at goods-producing industries. Indeed, since the second quarter of 1988, labor costs at goods producers have decelerated steadily, while service companies have seen their costs rise more rapidly (chart). In the first quarter, employment costs at goods producers increased by 3.5%, vs. a 5.3% rise for service companies.

In the goods sector, the slowdown shows up in wages. But that may be misleading. Many unionized companies, many of which are goods producers, have substituted

WHERE LABOR COSTS ARE RISING FASTEST



Business Outlook

lump-sum payments tied to profits or productivity in place of straight wage gains. The government, in measuring labor costs, counts these payments as benefits.

As a result, benefit costs have grown at a much faster pace than wages and salaries among goods-producing workers. Still, the overall deceleration in compensation indicates how closely goods producers, especially the manufacturing sector, are watching costs as they face increasing competition around the globe.

What makes the overall increase in labor costs inflationary is the stagnation of productivity. Although factories continue to cover their higher labor costs with productivity gains, output per hour in the overall nonfarm business sector probably grew little, if any, in the first quarter, following a no-growth fourth quarter.

That's because productivity in the huge service sector remains exceptionally poor. And since there hasn't been a rise in efficiency to cover the service sector's escalating labor costs, service producers that haven't already done so will have to raise prices or risk falling profits.

With labor markets so tight and expectations of ever-increasing health care costs, there are few signs that employment expenses will slow this year. Even weaker demand in the second quarter might not make a difference. When companies cut production, they shorten the workweek before laying off workers. Although that might help slow wage growth, it won't significantly cut benefit payments. So businesses will be increasingly hard-pressed to stem the rising tide of labor costs.

DURABLE GOODS ORDERS ARE SOFT

One reason that labor costs in the goods-producing sector have slowed somewhat is industry's loss of momentum. That's partly a reflection of the slowdown in export growth, so important to manufacturing's vigor in 1987 and 1988. A drag in consumer demand during the first quarter, especially for autos, is also responsible.

New orders received by manufacturers of durable

goods rose 0.8% in March, to \$124.9 billion, but the decline 3.6% in February and 2.8% in January. In addition, the March increase was not broad. Transportation equipment, where orders jumped 10.4%, reflecting large increase in bookings for new aircraft, accounted for nearly all of the month's gain. Excluding transportation, orders dropped 2.8%.

The transportation sector is extremely volatile because of the high price tags for aircraft. Transportation orders jumped 22% in December, only to fall back sharply in both January and February. Even so, durable-goods orders, excluding transportation, have declined in each of the past three months, a sign of broad weakness (chart).

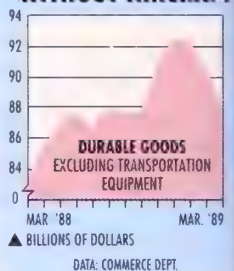
In March, most other industries posted order decreases, including primary metals, down 3.8%, and electrical machinery, off 6.7%. For the entire first quarter, bookings in these two sectors were below their fourth-quarter levels. But orders for nonelectrical machinery, which were up 1.4% in March, rose last quarter.

That's because capital goods, an important export category, are still a pocket of strength in hardgoods manufacturing. Orders for nondefense capital goods rose 2.9% in March, to \$38.1 billion, the fourth increase in the past five months.

The overall outlook for the factory sector remains good, at least for the coming months. The backlog of unfilled orders for durable goods, up 1.1% in March, to \$460.6 billion, has been rising for 25 consecutive months.

That means manufacturers have plenty of work to keep them busy. But to remain competitive, they need to add workers without boosting overall labor costs. Managing wage growth will be the key in the inflation outlook for the rest of the year.

ORDERS LOOK WEAK WITHOUT AIRCRAFT



THE WEEK AHEAD

NAPM SURVEY

Monday, May 1

The National Association of Purchasing Management's index of business activity probably rose to 50.6% in April from 50.4% in March. The expected reading indicates the economy is still expanding.

CONSTRUCTION SPENDING

Monday, May 1, 10 a.m.

Construction spending likely fell by 0.3% in March, led by a drop in homebuilding. Spending was unchanged in February.

NEW SINGLE-FAMILY HOME SALES

Tuesday, May 2, 10 a.m.

New-home sales fell in March, probably to an annual rate of 600,000. Rising

mortgage rates are stopping people from buying homes. In February, new homes sold at an 626,000 annual rate.

FACTORY INVENTORIES

Tuesday, May 2, 10 a.m.

Factory inventories probably grew by 0.3% in March, after a 0.5% rise in February. Output fell 0.1% in March, but shipments likely fell by a larger amount.

PRODUCTIVITY

Wednesday, May 3, 10 a.m.

Output per man-hour in the nonfarm business sector was probably little changed in the first quarter. Productivity was also flat in the fourth quarter. This suggests that nonfarm unit-labor costs increased at an annual rate of

about 5.2% last quarter, compared with a 5.4% pace in the fourth.

EMPLOYMENT

Friday, May 5, 8:30 a.m.

The consensus is that nonfarm payroll grew by a healthy 240,000 new jobs in April. That compares with a 180,000 gain in March. Most economists also expect that the unemployment rate edged down to 4.9% last month from 5% in March.

INSTALLMENT CREDIT

Friday, May 5

Consumer debt likely expanded by about \$3.5 billion in March, after growing by \$4.2 billion in February. The expected gain would be the lowest since September, 1988, and reflects weak car sales.



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PLANEMAKERS HAVE IT SO GOOD, IT'S BAD

GETTING ORDERS FOR JETS IS ONE THING, PROFITS ARE ANOTHER

These days the big makers of commercial passenger jets are acting as if they're hot growth companies. In the past year, as airlines vied to buy a record number of planes, the total firm orders for Boeing, Airbus, and McDonnell Douglas surged to more than 2,600 planes. Even Fokker of the Netherlands, which seemed to be on its last legs two years ago, has landed an order worth up to \$3 billion from American Airlines.

But news of a startling loss at McDonnell Douglas' commercial aircraft division reminded investors that since the start of the jet age, it has often been easier to make an innovative plane than a decent profit. Douglas is struggling, Airbus has yet to make money, and even mighty Boeing is fighting to improve subpar margins. As the world's airlines reequip their fleets, the planemakers are finding it ever more challenging to keep their costs under control.

McDONNELL DOUGLAS: AN ORDER BOOM, BUT AN OPERATING LOSS

During the presentation by Chairman John F. McDonnell to shareholders at McDonnell Douglas Corp.'s annual meeting on Apr. 21, a video projector broke, leaving the audience to stare at a blank screen in the dark. Meanwhile, the soundtrack raced ahead, loudly extolling St. Louis-based McDonnell's commitment to quality in everything it does. "I think you can see the enthusiasm," McDonnell explained, "but you can also see we're not quite there yet."

The same could be said of McDonnell's commercial aircraft business, which is enjoying a recent surge in orders. On the day of the annual meeting, shareholders were shocked to learn that the booming Douglas Aircraft Co. unit, which makes the popular MD-80 for commercial airlines, logged a \$66 million operating loss in the first quarter. The aerospace giant's stock plummeted more

than 8 points, to \$85, in two days of trading, before mounting a slight recovery to about \$86.

Although the stock may rebound further, the company's fortunes won't snap back so easily. McDonnell's woes stem from its own success. In 1967, it purchased the Douglas Aircraft unit, and ever since, McDonnell has fought desperately to boost orders for Douglas, a perennial financial laggard and also-ran to Boeing Co. Finally, Douglas President

James E. Worsham, who retired recently, developed such successful plane-selling ploys as cut-rate leases and promises to deliver faster than Boeing. Then the world's airlines started buying new equipment en masse. Now, Douglas has a backlog of some \$18 billion in firm orders for its MD-80 and new MD-11 widebody (chart). That's easily enough to keep its plant humming for more than three years.

OUTDOOR JOB. But that fat order book is suddenly the source of some big headaches. Suppliers in the metal-forging industry have been unable to keep up with McDonnell's brisk sales pace. In the last two years, the work force at Douglas has doubled, to about 44,000, and the new workers have been much less productive than seasoned employees, according to Jerry G. Brown, McDonnell Douglas senior vice-president. Because or-

ders are booming, new hands go through an abbreviated training period before they hit the assembly lines.

To make matters worse, until February, the plant's managers tried to keep to the schedule by pushing planes through the giant assembly line in Long Beach, Calif., even if all the work at one particular station hadn't been completed. As a result, workers had to leave their stations and catch up with the planes elsewhere, either in other part-



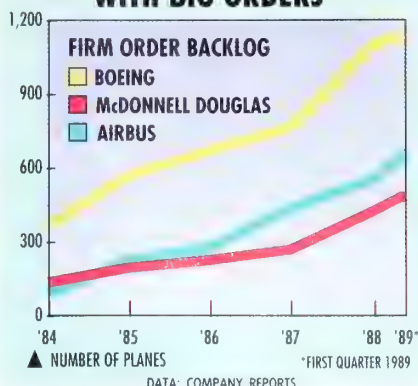
EMBARRASSMENT OF ORDERS: MD-11s ARE IN HOT DEMAND

the factory or outside on the tarmac. Now, this year's delivery schedules for the MD-80 have been pushed back by 15 to 30 days. "Worsham did a marvelous job of building the business, but in the process he made a lot of promises they're having trouble meeting," says Paul H. Nisbet, an aerospace analyst at Prudential Bache Securities Inc.

John McDonnell is now scrambling to extract some needed profit from Douglas. To replace Worsham, he has installed Robert J. Hood Jr., the former head of McDonnell's missile systems group, which gained a reputation in the industry for high profits and tight cost controls on the assembly line. McDonnell is also farming out some component work to Douglas' sister company, McDonnell Aircraft, which normally makes combat planes. And last year, Douglas leased a plant owned by the U.S. Air Force in Columbus, Ohio, to expand its own aircraft-parts fabrication.

But the linchpin of John McDonnell's exit strategy, a wrenching reorganization of the Long Beach plant, has so far only aggravated Douglas' poor performance. McDonnell, an engineer himself, is reducing the layers of management at Douglas to five from the current nine.

PLANEMAKERS ARE GRAPPLING WITH BIG ORDERS



In a move to give employees more responsibility, workers are being divided into production teams that elect their own leader and manage their own work flow. Now a plane is supposed to remain at a work station until the next stage of assembly is completely and correctly done.

SLOW RESPONSE. The aim of the makeover is to streamline decision-making and avert the need for another billion-dollar production facility—a risky move in the cyclical aircraft business. But Mc-

Donnell admits that since the reorganization began, the workers have not yet adjusted to the new practices and not all the intended management changes have taken place. Productivity at the plant has actually fallen, accounting for a big chunk of the first quarter's operating loss. McDonnell predicts the situation won't stabilize before the second half of 1989. So in July, he may have to tell airlines that Douglas must push back delivery dates again. "There's lots of pressure to speed up the process because it's so disruptive," McDonnell says. "But I don't want to be premature, because then you've done a lot [of changes] for not much benefit."

McDonnell cannot afford a further deterioration in Douglas' operating margins, which at 2.6% are half those of commercial business archrival Boeing. McDonnell also has to handle high interest costs as it borrows to finance research programs in both military and commercial aircraft. And the core combat aircraft unit—where hefty profits until the mid-1980s had flown cover for Douglas' poor financial performance—is suffering from softer earnings as well.

It all sounds depressingly familiar: Like his father and cousin, who headed the company before him, John McDonnell is striving mightily to overcome Douglas' own tradition of making excellent planes that fail to produce superior profits.

By James E. Ellis in St. Louis

BOEING: A BACKLOG STRAINS ITS ASSEMBLY LINE

April has been stupendous for the Boeing Co. Thanks to gigantic orders from GPA Group Ltd. of Ireland and UAL Corp., the Seattle plane-maker's backlog of firm orders has increased by more than 400 planes, to 1,515, in just three weeks. At \$161 million, first-quarter earnings jumped 18% above comparable figures last year. The stock, which climbed steadily in 1988, has surged to a high of 74.

But amid all this good news at Boeing's annual meeting, Chairman Frank A. Shrontz sounded a note of caution. He spoke of the "substantial risk" Boeing runs in its commitment to deliver 57 of its new 747-400 jumbo jets this year. With deliveries running several months late, Boeing will have to turn out an unprecedented 27 of the jumbos in the fourth quarter. Shrontz also spoke of the need to improve productivity and quality control in both the military and commercial divisions.

Shrontz is right to be cautious. For in the next year Boeing will have to walk a tightrope as it strives to meet its huge backlog without letting costs get out of control. Already, Boeing plans to increase overall production even more,



Top of the News

from 27 jets a month to 34 by mid-1990.

Shrontz doesn't want Boeing to make more mistakes as it boosts output. "We do not intend to increase production rates too quickly," he says. Boeing's productivity has already suffered because of suppliers' tardy delivery of parts and an influx of inexperienced workers hired to boost output. And despite the boom in orders, fierce pricing competition with McDonnell Douglas Corp. and Airbus Industrie helped keep operating margins in commercial aircraft at 5.1%, while Boeing's overall margins were only 3.5% last year. Margins are expected to improve but probably won't reach 1978's high of 9.4%. As Howard A. Rubel, a C. J. Lawrence, Morgan Grenfell Inc. an-

neers' union. "Now it's time to share." Employees should have extra leverage because of the overtime they have put in. Moreover, the company can ill afford a strike in the fourth quarter, when it must deliver so many 747s.

Boeing also has headaches from its military transport business, which lost \$95 million last year and is expected to be only modestly profitable in 1989. But Shrontz's real challenge is in the commercial division. Boeing has probably mastered better than any other company the art of making a big passenger jet profitably. Now, faced with a glut of orders and a relentless schedule, its mastery will be challenged more than ever.

By Maria Shao in San Francisco



THE AIRBUS 320: LUFTHANSA WANTS A STRETCHED VERSION, OR IT MAY LOSE ITS PATIENCE

alyst, puts it: "They're earning grocery store margins on a high-tech product."

The 747 program will be the one to monitor most closely. Because of penalties to be paid for late delivery and the extra costs of pushing production, gross margins on the new 747s will initially be 20%, compared with 30% for previous 747 models. As a result, each 747 delivered would contribute only about 10¢ a share to annual earnings, vs. the normal 13¢, estimates William N. Deatherage, an analyst at Dean Witter Reynolds. That slip should be more than offset by volume, if deliveries are on schedule.

Labor costs also are rising. Boeing recently took the unprecedented step of temporarily hiring 670 workers from Lockheed Corp. to help speed its 747 line, a move estimated to cost about \$25 million. And along with the 86% surge in employment during the past five years, to 157,000, Boeing has had to pay for plenty of overtime to its own workers.

PAY DAY? Boeing's rosy earnings outlook could be a handicap in labor talks this fall. The International Association of Machinists & Aerospace Workers and the Seattle Professional Engineering Employees Association, whose three-year contracts expire this year, are in a strong position. Boeing has "got a ton of money in the bank," notes Daniel Mahoney, general counsel for the engi-

AIRBUS: STILL IN THE RED DESPITE SUBSIDIES

Phone up Airbus Industrie in Toulouse, France, and you will hear a few rousing bars of Europe's new anthem, Beethoven's "Ode to Joy." Appropriate, for Airbus brass are ecstatic over a flood of new business. The European consortium has booked more than \$10 billion in firm orders and options in the past month, including a \$3.6 billion deal with Trans World Airlines Inc., its top U.S. sale ever. Its backlog has doubled in 16 months, to 770 planes.

Now comes the hard part: building all those planes without hitting the same production snags that have tripped up McDonnell Douglas Corp. and Boeing Co. Airbus aims to boost annual output to 200 planes by 1994 from 101 set for this year. Employment, now at 30,000, may nearly double. "We face a terrific challenge raising production rates," ad-

mits Adam Brown, vice-president for strategic planning at Airbus.

Many observers believe Airbus will have an easier time than its U.S. rival. Because European laws make layoffs tough, Airbus' partner companies can call on a large pool of seasoned aerospace workers who were never forced to look for other jobs when orders were slower. Airbus says its workers' average experience is more than 10 years.

Yet Airbus executives admit that the face "learning-curve" costs for new workers and for a plant being built in Toulouse for two new widebodies, the A-330 and A-340. It already faces heavy cost-cutting pressure from European governments tired of subsidizing this 2-year-old, profitless venture. Bonn still wants to build a second A-320 line in Germany, but an Airbus insider says cost concerns have killed the proposal.

In theory, government subsidies are to be paid back when Airbus planes start producing a profit. Until recently, the goal has been to show a profit by 1991. But given the costs of expanding production, one Airbus executive allows: "I think that's very optimistic."

INFLATED ORDERS? Airbus publishes financial reports, so total losses are unclear. Analyst Wolfgang Demisch of U.S. Securities figures \$15 billion in tax money has been pumped into the venture, mainly by France, West Germany, and Britain. Bonn recently agreed to provide Daimler-Benz up to \$2.4 billion if it takes control of Deutsche Airbus, the consortium's German partner, to offset currency fluctuations on dollar-priced Airbus sales. Washington claims that such support would violate trade agreements.

One worry for Airbus is that airlines may be inflating orders to keep a place in crowded delivery lines. And if air traffic falls, orders might quickly evaporate. That would hurt the U.S. companies too, but "it would be hard in Europe to cut the work force," says Joseph Kuchar, technical director of Air Partners, a French aircraft leasing firm.

While Airbus grapples with its recent success, it also has to worry about the future needs of customers. Lufthansa has been pushing it hard to commit to a longer version of the A-320 seating 110 passengers. Impatient, it may consider the Boeing 757 instead. Says Jürgen Weber, Lufthansa's director of operations: "If Airbus does not come through, we will have to think over our fleet policy."

Airbus has the orders it needs to make it a permanent player in world aerospace. Now, if it could only turn those orders into the profits that have proved so elusive.

By Stewart Toy in Paris and John Templeman in Bonn

One worry for Airbus is that airlines may be inflating orders to keep a place in crowded delivery lines

DON'T EXPECT A CARETAKER TO TAKE CARE OF TRADE

In a few weeks, a caretaker hand-picked by the ruling Liberal Democratic Party's bosses will succeed disgraced Prime Minister Noboru Takeshita, the highest-ranking victim of the Recruit influence-peddling affair. Japan's caretaker prime minister, likely to be a party elder in his 70s, will read water for 6 to 12 months until the bosses choose his replacement. But chances are that he won't be much of a force for change either. After years of grudgingly assuming a global leadership role commensurate with its economic clout, Japan is about to take a big step backward. And that can only mean more trade tensions between Tokyo and Washington.

Stuck with a figurehead at its helm, maybe for years to come, Tokyo no longer will have an influential point man to bear gifts to Washington in the fashion of the soft-spoken Takeshita or his forceful predecessor, Yasuhiro Nakasone. And with most of the LDP's other leaders also tainted by Recruit Co.'s generous political donations and favors, Japan is unlikely anytime soon to pick a leader willing to take on the nation's labyrinthine, protectionist bureaucracy. The power gap at the top, worries Brookings Institution Senior Fellow Philip H. Tresize, "will scare the politicians and bureaucracy away from the very things we want."

RED UP. There are already plenty of opportunities for friction. Japan's \$78 billion global trade surplus is on the rise again. And Washington is always pushing Tokyo to increase defense spending, liberalize financial markets, and boost government purchases of U.S. supercomputers. But some analysts now fear that Japan's bureaucrats, left alone, probably will invite even more troubles by backsliding on existing initiatives to open the nation to more imports.

The bureaucracy's first victim could be U.S. efforts to maintain a toehold in the heavily regulated telecommunications market (page 58). And even before Takeshita quit on Apr. 25, the Japanese were dragging their feet on Washington's demand that the U.S. have a 40% share in the joint production of the proposed FSX fighter plane. Why not stall? After all, one Japanese government official explains, the LDP, weakened both by Recruit and by Ta-

keshita's imposition of a 3% consumption tax, just can't "tell voters they must accept more liberalization." But a frustrated Washington's view increasingly is: "Why not?"

Look for the first signs of a more hawkish U.S. trade stance to show up by Apr. 30. That's when U.S. Trade Representative Carla A. Hills, acting under the 1988 trade law, will issue a report citing the unfair trading practices of many Asian and other exporters. A month later, she will select the



TAKESHITA'S EXIT WILL LEAVE A GAPING HOLE

biggest offenders, targeting them for possible retaliation.

Hills might have held off placing Japan on her hit list as long as Takeshita's future was in doubt. But now she may feel more free to strike. And with Japan's weak leadership probably unwilling to take on such politically touchy domestic issues as reforming its farm policy or its archaic product distribution system, Japan may be able to offer Hills few concessions to head off U.S. sanctions.

Not all progress will grind to a halt. Senior Finance Ministry bureaucrats, for example, tend to forge their own accords with foreign governments. If they were to backslide now, they

would face howls from giant Japanese banks and brokers protesting that their enormous overseas operations would be at risk. Nor is the Finance Ministry likely to renege on Takeshita's plan to pump \$4.5 billion into Treasury Secretary Nicholas F. Brady's scheme to lower Third World debt.

But don't expect any new Japanese foreign-affairs initiatives until 1990—or maybe even later. In fact, even before the Recruit scandal felled Takeshita, his government had begun withdrawing into itself. With the Recruit affair keeping LDP pols busy on the home front, Tokyo couldn't afford to send its Finance Minister to the fall and spring meetings of the Group of Seven industrial countries. Japanese efforts to help the U.S. and other G-7 members stabilize currency markets have been limited, at best, lately. And while the caretaker prime minister doubtless will attend the economic summit in Paris in July, he certainly "will not be a vigorous player," says Tokyo University political scientist Takashi Inoguchi.

MR. CLEAN. If the caretaker won't stick his neck on the line, who will? LDP Secretary-general Shintaro Abe and former Finance Minister Kiichi Miyazawa once were leading contenders to succeed Takeshita. But each is reported to have received \$770,000 from Recruit. In fact, with Recruit spreading its favors throughout the LDP, the party bosses are running out of powerful candidates. In the end, they may have to settle for a neutral Mr. Clean. That happened 15 years ago, when the bosses named Takeo Miki prime minister after Kakuei Tanaka resigned during another scandal.

Right now, public confidence in the LDP is so low that the party may even lose its lower-house majority in elections due to be held by mid-1990. To restore faith in the party, some LDP members want to launch a crackdown on Japan's obviously lax political funding system. But even if Takeshita's resignation is enough to steer the LDP onto such a course, it may be some time before its leaders try to venture onto the global center stage. Until then, as a Japanese securities industry executive observes, "unless Japan takes action on trade, it's going to be on a collision course with the U.S."

WHAT'S PUMPING UP GASOLINE PRICES?

Catastrophes, coupled with tight supplies, spook retailers

With oil prices squirting up, Roger R. Hemminghaus had been braced for the worst. As chairman of Diamond Shamrock R&M Co., he figured he was at the mercy of the crude market. But in the past four weeks, he has been able to raise his gasoline prices 28%—three times as much as his crude costs rose. The inevitable result: fatter refining profits. After a slow start this year, Hemminghaus is licking his chops, hoping for a replay of last summer when profits boomed.

Around the country, refiners have jacked up gasoline prices faster than you can say "Valdez." Gas prices have been running ahead of crude quotes since January (chart). But they've really taken off in the past month: Unleaded regular gas has jumped 29%, to 71¢ a gallon on the spot market, while rising about 16¢ a gallon at self-serve stations, to \$1.06, according to the *Lundberg Survey*. "The market's in a panic," observes consultant Thomas C. Ryan, "and the refiners are cashing in on it."

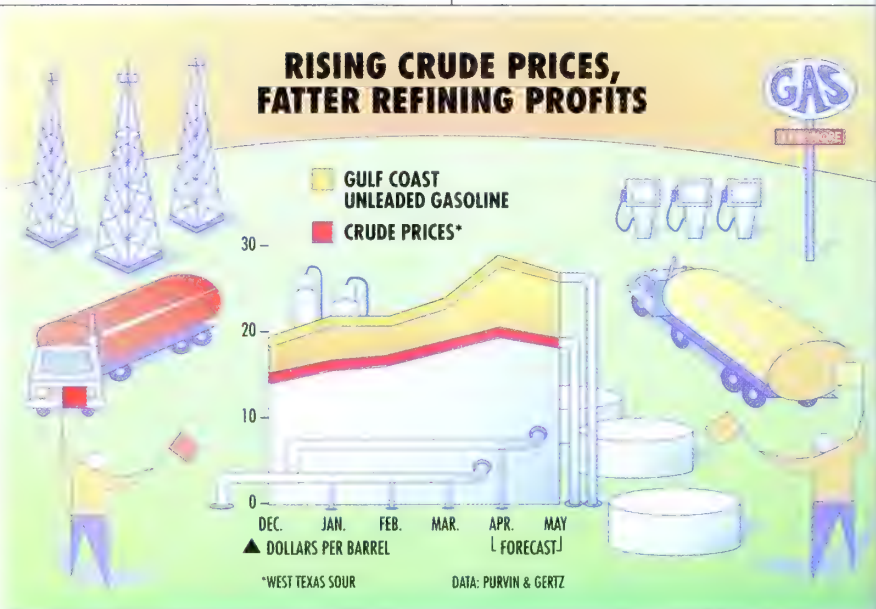
SPREADING FEVER. The panic built slowly. Early this year, refiners raced just to catch up with crude prices, which had risen since October when OPEC reached a deal limiting output. But in late March, the Exxon Valdez ran aground. That squeezed supplies of Alaskan crude to the critical West Coast market. Worried about being cut off by refiners, gasoline distributors and retailers desperately bid up prices. Then, on Apr. 10, a fire at a Chevron Corp. refinery outside San Francisco knocked out 25% of the refin-

ery's 160,000 barrels of daily output—and heightened buyers' desperation.

Gas price fever has since spread nationwide. One big reason is a squeeze on capacity: U.S. refiners have been running flat out. The reason: Since 1980, more than 100 refineries—mostly small

sumed daily in the U.S., "in a market this tight, any loss of production would send prices up," says Purvin & Gertz President Robert A. Hermes. Nor have imports, which account for 6% of supply, flooded in to make up the difference. Much of the foreign gas is flowing to Europe, where prices are higher.

Obviously, refiners can only preserve their good fortune so far. If prices climb too rapidly, that could suck in imports of oil, especially from Latin America. And higher prices eventually will push motorists to limit their consumption. But for now, the refiners are enjoying a nice ride. Net margins for the Gulf Coast refiners jumped 270% in April, to \$2.68



ones—have been shuttered, even as gasoline demand was on the rise, gaining 2% last year. Recently imposed federal environmental rules could reduce refining capacity by a further 150,000 barrels a day, according to industry consultants Purvin & Gertz Inc. While that's only a fraction of the 7 million barrels con-

sumed daily in the U.S., "in a market this tight, any loss of production would send prices up," says Purvin & Gertz

The biggest winners are the long-suffering independents. In 1983, when Valero Energy Corp. spent \$650 million on its state-of-the-art, 67,000-barrel-a-day refinery, it was hoping to refine residual oil, a cheap gunk-like crude byproduct which sells at a discount to crude. But

PHIBRO: SALOMON'S ACE IN THE OIL PATCH

No one's happier about the refining boom than Salomon Inc. Its giant oil trading and refining company earned \$98 million before taxes in the first quarter, helping to limit Salomon's overall pretax loss to "only" \$72 million. That makes Phibro Energy Inc. Salomon's star asset.

By the time Salomon merged with Philipp Brothers Inc. in 1981, Phibro was already one of the world's largest oil traders. But a few years later, Phibro

President Andrew J. Hall, an executive vice-president under then-Chairman Thomas O'Malley, wanted a way to hedge his trading bets. So in 1985, Phibro snapped up Hill Petroleum Co., a tiny Louisiana refinery nearing bankruptcy. With refining in the doldrums, recalls Hall, "there were a lot of doubters."

Phibro next bought three more refineries, including Texas City Refining Inc., a 125,000-barrel-a-day plant near Houston.

All told, Phibro has been able to put together a refining system with a capacity of 300,000 barrels, paying 10¢ on the dollar, or less than \$10 million, company sources say. Says a investment banker who has dealt with Phibro: "They only buy when there's blood in the water."

NIMBLE MOVES. Phibro's timing could have been better. Since it bought Texas City, in June, 1988, refinery prices have soared—and so have downstream prices. Phibro's trading gains have remained strong as well, helping the company clear a fiscal 1988 pretax profit of \$100 million, or 32% of Salomon's total.

By owning its refineries, Phibro has

ack demand for gas and a tightening market for residual fuel wiped out margins. From 1983 to 1987, Valero's refining operations accumulated \$128 million losses. But last year, they turned a \$3.8 million profit. This year, after an 1 million first-quarter profit, earnings are expected to triple. After a slow start, other independents, such as Ashland, Coastal, and Tesoro, have seen profits drop. Analysts expect Coastal's huge refining and marketing operations to make \$100 million in 1989, double 1988 profits.

ALL SYSTEMS GO. The majors, too, nudged along through most of the first quarter, and profits reflected it. But by late March, they began to make out nicely. After spending millions upgrading their refining and marketing operations, they're generating bigger returns there than from pumping oil. Texaco Inc., for instance, last year made \$651 million on domestic "downstream" operations, four times its exploration and production profits. With crude prices finally rising, says Bruce E. Lazier, analyst at Prestt, Ball & Turben Inc., "for the first time since 1980, the majors will be hitting on all cylinders."

Brighter prospects downstream have so far sparked a slew of refinery deals. Since September, nearly \$5 billion has been spent on refinery acquisitions—more than in the previous five years combined, Ryan says. That includes Saudi Arabia's \$1.8 billion joint venture with Valero, launched in January. Other big moves, including Mobil Corp. and British Petroleum Co., have been snapping up plants, too. All the dealing has more than doubled prices in the past year, to nearly \$4,500 for each barrel of daily capacity, according to First Boston Corp. And, with no new refineries planned, the value of existing ones could keep rising. George C. Morris, an industry specialist at First Boston, puts it: "It's a new world in refining." For motorists, so much the pity.

By Mark Ivey in Houston, with Ronald Brown in Los Angeles and bureau reports

ver many traders. If it contracts for oil on the spot market, for instance, it either resell it or run it through its refinery and sell the products, usually to industrial users. "It means we're not at just the mercy of refiners or other buyers," says Ivey. "We can play either market."

The Phibro has moved nimbly, Salomon's other businesses have struggled. Its dealer arm alone lost \$98 million in the first quarter. The big money now is in investment and merchant banking, where Salomon has flourished. Until it can catch up, it will be relying heavily on that dirty, filthy work done so far from Wall Street.

Mark Ivey in Houston, with Judith H. Siskin in New York



ENGINEER KENT KRESA: "WE HAVE TO ACCOMPLISH THE THINGS THAT ARE ON OUR PLATE"

THE GOOD SOLDIER KRESA STEPS UP AT NORTHROP

Can its new boss polish the company's tarnished image?

Northrop Corp. insiders expected Kent Kresa to go job hunting in 1982 when he was elevated to senior vice-president for long-range planning at the defense contractor. After six years of running the company's consistently profitable drone-airplane unit, Kresa was given a fancy title but had fewer real responsibilities. Word spread through the corridors that he was mulling a move to Chrysler Corp.

But Kresa stayed, and on Apr. 20 he was rewarded when Northrop Chairman Thomas V. Jones named Kresa to succeed him later this year as chief executive. Whether the Northrop job will be worth the headaches is quite another question.

Jones, who first went to work for Northrop in 1953, is leaving with both the company and his personal reputation under darkening clouds. Northrop's \$68.1 billion B-2 stealth-bomber program faces deep federal cuts. And the company has pleaded innocent to charges of supplying faulty missile parts to the Air Force. It also faces grand jury probes for shoddy workmanship, overbilling, and bribery.

ODD TIMING. Those problems fueled speculation on Wall Street that Northrop's board urged the 68-year-old Jones to step down. "Tom Jones is mentally and physically capable and likes his job," says Joseph Campbell, a Paine Webber Inc. analyst. "I would've thought he'd stay on forever—unless something pressured him out." Company officials say Jones planned to announce his resignation at the May 17 annual meeting. But Jones decided to announce it earlier.

Yet the timing is odd. A grand jury is well along in its probe of possible involvement by Jones in an alleged 1983 bribery scheme to get South Korea to buy Northrop's troubled F-20 fighter jet. A congressional panel is also investigating the case. Those problems couldn't have helped Northrop in competition for new defense work, including a \$45 billion program to build the Air Force's Advanced Tactical Fighter.

Kresa seems ideal to improve Northrop's image. An ex-researcher in the Pentagon's advanced radar-and-infrared operation, the 51-year-old engineer is well regarded in Washington. Working his way up for the past 14 years, Kresa headed many production operations—experience that could help convince the Pentagon that he can bring the B-2's development costs under control and manage its production.

DESK JOB. Nor could Kresa be a greater contrast to Jones. An intimate of Northrop founder Jack Northrop, Jones was a throwback to aviation's pioneer days. Kresa, whose poor vision kept him out of the Air Force, is more likely to keep an eye on ledgers and assembly lines. Says Kresa: "We have to accomplish the things that are on our plate."

Those things include plenty of big-ticket programs. Northrop is also laden with the rap of a company that can bid for big projects but can't control costs. Kresa says that isn't so. Now, seven years after he wondered if Northrop was the place for him, he intends to show he's the answer to its problems.

By Eric Schine in Los Angeles

THE BABY BELLS TODDLE TOWARD CABLE

If PacTel nabs a Chicago franchise, its siblings are sure to follow

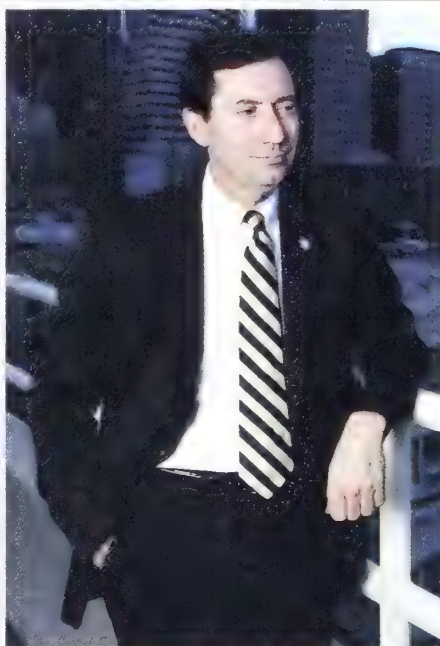
It's only a toe in the water. But Pacific Telesis Group's first move into American cable TV is already making big waves. On Apr. 20, the San Francisco phone giant agreed to buy a 68% stake in Group W Cable Associates of Chicago, a cable franchise formerly part of Westinghouse. If federal regulators bless it, not only will PacTel get into a hot-growth business, but the seven powerful Bell companies could get the access to the \$13.8 billion cable business that they've been fighting for.

At first glance, PacTel's deal looks tiny. Group W is only the 75th-largest system in the U. S., with 97,000 subscribers. What's more, it serves just 24% of the homes in its area vs. the average market penetration of 54%.

MOVIES BY PHONE. Look again: There's more at stake here than who will entertain the couch potatoes of northern Chicago. The Baby Bells eventually would like to compete with cable monopolies in their home markets. And they argue that they have the resources to open up a vast, untapped market for household services, from movies via telephone lines to on-line information services. Dataquest Inc. analyst Steven A. Sazegari says the deal "will change the face of the cable industry."

First, though, PacTel must jump through tricky legal and regulatory hoops. It must persuade U.S. District Judge Harold H. Greene, who enforces the Bell breakup, to go along with the Justice Dept.'s advice to approve the deal. Greene has allowed the Baby Bells to enter businesses such as cellular phone service outside their territories. But a decision could take a year or more—especially given cable industry threats to try to block approval.

That's not stopping PacTel Chairman Sam L. Ginn from stalking cable properties. Last August, Houston Industries Inc. outgunned Ginn with a \$1.3 billion offer to acquire Rogers Communications Inc.'s U.S. cable properties. But he recovered last December, when he teamed up with Jones Interchange Inc. of Englewood, Colo., to buy an 89% interest in two London startups. For Group W, PacTel fashioned a Byzantine arrangement whereby Austin (Tex.)-based partner Prime Cable will buy Group W for \$198 million, sell a 68% stake to Transamerica



CHAIRMAN GINN: "CABLE IS INFORMATION DISTRIBUTION, AND THAT'S WHAT WE DO"

Corp., which will sell it to PacTel when Greene O. K.'s the deal. Despite misgivings, Prime wants a deep-pocket partner. Transamerica, whose board includes Ginn, gets a \$650,000 annual fee.

Why hunt such meager game? Ginn says cable's a natural for PacTel, which was the first Baby Bell to offer cellular phone services outside its area. "Cable is information distribution," he says, "and

that's what we do." Besides, he adds, a small operation lets him get experience without betting the company.

Cable operators see more than just good education. Approval to operate outside his region is "the camel's nose under the tent" before the Bell companies begin offering cable locally, says a National Cable Television Assn. spokesman. Some of it is defensive: PacTel could use Group W's lines to offer services that compete with Ameritech Corp.'s Illinois Bell. Ginn plays this down, insisting the cable is plenty profitable in any region. **TRANSOCEANIC CABLE.** Even so, adding information services to the standard cable programming may be the only way a cable business can grow enough to justify the premium prices now being paid—especially since 46 million TV sets, or half the country's total, are cable and there's less potential for growth. Cable system prices have zoomed an average of 45%, to as much as \$3,000 a subscriber, in the last two years.

For now, U.S. West, the only other Baby Bell to test the cable TV waters, is focusing its efforts overseas. Acquisition costs are lower outside the U.S. and there's more freedom. Hong Kong, for instance, where U.S. West is bidding with a consortium to develop a cable system for 6 million homes, plans to offer low voice, data, and video services all on the same line.

There's no guarantee, of course, that the Baby Bells can run cable as well as they do phones. They aren't programmers, and that's a difficult skill to pick up. And their problems in marketing are legend. Consequently, PacTel's deal, if approved, "won't cause a stampede," says Morgan Stanley & Co. analyst John Tinker. Just the same, even the tiptoeing of giants demands close attention.

By Robert D. Hof in San Francisco, with bureau reports

WALL STREET

A WAKE-UP CALL FOR INITIAL PUBLIC OFFERINGS

Investors are still cautious, but startups aren't going begging anymore

The October, 1987, stock market crash dashed Bytex Corp.'s hopes of going public. So the small Southboro (Mass.) communication-products company waited patiently. On Apr. 13, Bytex got its wish. The company raised \$10.4 million at a stock price that valued the company at a generous 18 times earnings. Bytex may have had to wait nearly 18 months, but it was worth

it. Says Chairman Steven G. Finn: "We think it was fair value."

Bytex' success may portend better times for the initial public offering (IPO) market. Growth companies, especially high tech, have long relied on IPOs to raise capital. After a postcrash lull, they're braving the water again. And with the market bouncing near postcrash highs, other companies may follow.

uit. Robertson, Stephens & Co., a San Francisco investment banker, has seven companies ready to go public, compared with nine for all of 1988. Alex. Brown & Sons has two companies waiting in the wings and plans to register nine more by June. That's double its 1988 score. "Last year started strong but ended as dog-heat," says Richard L. Franyo, an Alex. Brown managing director. Now, he says, the ramp is up."

There's still plenty that could go wrong. Investment bankers worry that the bad deal will scare away already jittery investors. Launching an offering in this environment, says Franyo, is like wading into a trout stream. You can cook the fish."

IT PARADE. For all the caution, though, the IPO's draw is strong. Small companies can become stars after parading before analysts and financiers. A listing on the stock pages carries prestige. Plus, IPOs open other forms of financing for fast-growing companies. Says Norman Fosback, editor of the newsletter *New Issues*: "If you can't raise equity capital, you can't borrow enough to finance growth."

Even more important, IPOs cut capital costs—and can increase managerial flexibility. Lately, small companies have been forced to rely heavily on more costly private placements. Venture capitalists who haven't been able to sell their stakes in startups have had to engineer acquisitions, thereby clipping the original management's independence. According to Venture Economics Inc., 135 venture-backed companies were acquired last year, while only 36 went public.

A bull market in IPOs won't return, though, until technology stocks recover from their continuing slump. But there are some glimmerings of hope on this front, too: When Silicon Valley-based network General Corp. went public in February, the stock sold for \$8 a share—well above the \$5.50-to-\$7 offering range. The price has since climbed to \$12 a share. "Network General was the first indicator that the market was open to high-tech IPOs," says Bytex' Finn Ambrecht & Quist Inc.'s index of growth stocks now stands at about 570, up from 525 at the end of last year.

Investment bankers must still assuage the fears of retail investors who have been burned by overpriced deals. So for now, investment bankers will probably only peddle only companies with proven track records. "We are focusing our efforts on companies with strong market positions," says Daniel H. Case III, a partner at Ambrecht & Quist managing director. But if Wall Street's smoldering affection for IPOs becomes a full-fledged fire again, those scruples are likely to be forgotten.

By Leslie Helm in Boston

Commentary/by Paul Magnusson

U.S. CONSUMERS, AND THE CARIBBEAN, ARE GETTING A SOUR DEAL ON SUGAR

Customs officials were puzzled. The sugar they were testing for purity was clearly marked as Canadian, and it entered the U.S. under Canada's quota. Yet tests showed that it was cane sugar from a balmy climate—as in Australia, mate.

The Byzantine rules governing the sugar trade inspire such shenanigans. Several of the 38 nations that export sugar can profit handsomely by resorting to a bit of legal arbitrage: They can sell their sugar to the U.S. at inflated prices, then buy cheaper sugar on the world market for their own use (chart).

American consumers and manufacturers pay an estimated \$930 million a year to preserve the antiquated quota system. Although there are only 12,000 sugar cane and sugar beet growers in the nation, they are a powerful bunch when teamed up with corn growers, who know that high sugar prices boost sales of corn sweeteners.

The Bush Administration could help end the sugar madness. But a timid White House has been scared off supporting a bill called the Caribbean Basin Initiative II, which is now being drafted by a House Ways & Means subcommittee. The original CBI was conceived in 1983 as a regional free-trade zone that would provide an economic tonic for impoverished Caribbean nations and their shaky governments. But powerful U.S. lobbies eviscerated it by exempting textiles, shoes, petroleum, leather goods, canned tuna, sugar, and watches from its liberal provisions. Since 1983, U.S. imports from the Caribbean have actually fallen by a third, to \$6.8 billion last year.

Sugar exporters ultimately got the worst deal of all. A bizarre provision of the 1985 farm bill required that the federal government guarantee U.S. producers at least 18¢ a pound for sugar—without any net cost to the Treasury. The CBI eliminated tariffs on Caribbean Basin sugar, but quotas were ratcheted down to keep the U.S. raw sugar price at an artificially high 22¢ per pound. As a result, the government didn't have to pay off the farmers.

But rising competition from artificial

sweeteners and corn syrups required ever lower quotas to keep the U.S. price stable. Foreign producers have seen their U.S. sugar quotas shrink by 63% since 1982. That means 400,000 jobs lost in the 22 Caribbean Basin countries since 1983, claims Jose Orive, who chairs the CBI Embassy Group, a coalition of Caribbean nations. "We are busting our tails to try to diversify and find alternatives to sugar, but how are you going to do that on the little islands like St. Kitts and Nevis?" he asks. Exports of manufactured goods are up, but they are dwarfed by the loss of earnings on sugar, the region's second-most-important commodity export after coffee.

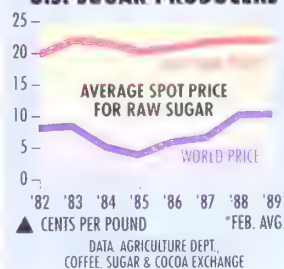
The outlook was brighter for the Caribbean last year. The Reagan Administration and a few in Congress wanted to eliminate sugar quotas entirely. Sam Gibbons (D-Fla.), chairman of the House Ways & Means trade subcommittee, sought at least

to restore the CBI's sugar quota to the 1983 level. But he was stymied by the U.S. sugar lobby, which wants stable pricing above all else.

Now, Gibbons is trying to freeze the overall CBI sugar quota at its current level while redistributing to CBI countries any unused quota allotments from other nations. "The current program just makes no sense," says Gibbons. "Someone has to start straightening it out." But the Bush Administration demurs, contending that Gibbons' modest sugar proposal would violate international trade rules that prohibit such juggling of quotas among nations.

The ultimate solution may lie elsewhere—in next year's farm bill or in the current round of trade talks in Geneva. The U.S. is seeking an agreement to phase out European farm subsidies, including those for sugar. But it's long overdue for Congress to admit that writing trade policy for the convenience of 12,000 U.S. sugar farmers is a bad idea. It's not often that the government has a chance to help struggling island countries—and save consumers \$1 billion in the bargain.

A SWEET DEAL FOR U.S. SUGAR PRODUCERS





AS SALES GROWTH SLOWS, DUNKIN' IS SHIFTING AWAY FROM THE DOUGHNUT SHOP CONCEPT

WHY DUNKIN' DONUTS LOOKS SO YUMMY

It has cash and real estate—but is no easy takeover target

There's plenty of mystery to the doughnut business. Like, why do doughnuts have holes? And, how do they get the jelly inside? Then there's this more pressing riddle: Is Dunkin' Donuts Inc. takeover bait?

Unicorp Canada Corp. provided clues on Apr. 20. It announced that its Kingsbridge Capital Group subsidiary had purchased 6.6% of the doughnut shop chain. Five days later, Unicorp said it had upped its stake by 1% and sought government permission to buy more than 50%. George S. Mann, chairman of the Toronto-based utility, real estate, and financial company, won't reveal his motives. "It's a well-managed company with lots of growth potential," is all he'll say.

If the stake is the prelude to a hostile bid, Unicorp's chances look slim. Five hours after the Securities & Exchange Commission filing, Dunkin' kicked in its defenses. The chain, based in Randolph, Mass., will lay off 14% of its work force, institute a tough poison pill, and create an employee stock-ownership plan controlling close to 15% of the company's shares. That will leave 30% of the stock in friendly hands, making a successful tender offer nearly impossible. Indeed, Dunkin's measures sent its stock down 3½, to 34¾. Said Chairman Robert M. Rosenberg, whose father catered doughnuts and coffee 40 years

ago: "We want to stay independent."

What makes Dunkin' look so appetizing? A solid cash flow, for one thing. Cash from operations could reach \$3.95 a share this year, says analyst Roger Lipton at Ladenburg, Thalmann & Co. And Dunkin' uses its assets efficiently, making most of its money from franchisee rent and royalty payments. Earnings this year should hit \$14.8 million, or \$2.25 a share, on revenues of \$120 million—up from \$13.5 million, or \$2.05, in fiscal 1988.

LOTS OF LOTS. Then there's real estate. Dunkin' owns the land under 210 of its franchised restaurants. Rosenberg argues that most are small roadside locations, good only for doughnut shops. But that land, most of it bought 10 or 20 years ago, could be dramatically undervalued on Dunkin's balance sheet: Property sales since 1986 yielded two and one-half times book value.

To get at the property, however, Unicorp has to buy the doughnut chain. And in the U.S.—where Dunkin' makes 90% of its money—fattening fried dough has seen better days. "People aren't buying as many doughnuts," admits George

Alepedis, a Dunkin' franchisee in Boston. "They're concerned about how the look." And supermarket bakeries have become tougher competitors.

Dunkin' has to find new markets—no matter what Unicorp does. Its 1,555 retail units dominate North America. But per-store sales have grown by an average of just 3% over the past five years (chart). The competition is struggling, too: Winchell's Donut Houses, of La Mesa, Calif., lost \$12.7 million last year on \$144 million in sales at its mostly company-owned stores.

Indeed, if Rosenberg eludes Unicorp, he will have to recharge the company. Since 1985, Dunkin' has sold off most of the 75 money-losing shops it owned and operated. Now, he's shifting away from the old doughnut shop concept. The latest restructuring will cut jobs in research and new business development. In other words, no more major new products and little franchise expansion.

To expand cheaply, Dunkin' wants franchisees to distribute their baked goods through smaller, kitchenless satellite shops and to convenience stores. Says Rosenberg: "Our intent is to put the product everywhere."

HOT STUFF. Rosenberg sees greater opportunities in more upscale food. He has sunk \$15 million into developing Tex-Mex-style restaurants called Chili's that accounted for 11% of revenues last year. He will spend \$7.9 million more this year—most of that generated by doughnut shop profits. Chili's could contribute as much as 40% of Dunkin's revenue and 25% of profits in five years.

Rosenberg may smell profits in the Chili's franchise, but critics aren't sanguine. Dunkin' is "particularly astute franchiser," says Susan F. Hager, analyst for Pioneering Management Corp., another big Dunkin' investor. Operation are another matter: Chili's lost \$2.9 million in fiscal 1988.

In fact, some analysts and investors believe that Rosenberg should simply dump Chili's. That move would boost earnings and the stock price. Real estate sale

might buoy prices further. Rosenberg's savvy moves have countered the first attack. And his new ESOP may put him out of a raider's reach. Now the question is whether Rosenberg will take advantage of his apparent flexibility to get Dunkin' cooking once again.

By Keith H. Hammonds in Boston, with Chuck Hawkins in Toronto



It wasn't in their job description. They didn't have books or manuals to show them the way.



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PHILLIPS PETROLEUM COMPANY



MAYORS

NOW SONNY BONO IS SINGING 'I WANT YOU, BABE'

The Palm Springs mayor is out to bag more tourists

The clock is ticking toward 10:30 a.m., and the mayor is nearly 30 minutes late for his first appointment. "Bono time," laughs Palm Springs City Council member Charles "Tuck" Broich, one of three people kept waiting. Just then, Hizzoner arrives. Even for this desert city, Sonny Bono looks casual in a short-sleeved blue sweatshirt, jeans, and beat-up boots. But don't let looks deceive: Bono means business.

One year after being elected mayor in a surprise landslide, the 54-year-old former pop singer and ex-hubby of Cher is waking up sleepy Palm Springs, Calif. Some locals grumble a bit, but Salvatore Phillip Bono is hawking his city like a Tinseltown huckster. He's bringing rock concerts, an international film festival, even the Apr. 26 Miss Hollywood contest to the place. "We're selling glamour, excitement," says Bono. "Whether we like it or not, we're in the business of attracting tourists."

LOTS OF INK. With true Hollywood flair, one of Bono's first acts as mayor was to hire a pricey Los Angeles public relations firm. That won him lots of ink, and some of it rubbed off on the city. In November, Bono blocked off city streets for a Monte Carlo-style Vintage Grand Prix auto race. Nearly 40,000 tourists showed up, more than three times the number in 1987, when it was held at the city's airport. One reason: the \$400,000 in free ads kicked in by the *Los Angeles Times* that Bono got in exchange for the right to sponsor the race.

More tourists mean more money for Palm Springs—which the city could sorely use. Despite its reputation as playground for Hollywood stars and millionaires, seniors make up nearly a third of the population of 38,000, and the mean income is half that of some neighboring towns. And Palm Springs long has been losing tourists to newer, ritzier desert resorts such as Palm Desert. Last year,

the city posted a \$2.5 million deficit, yet voters last November nixed a new tax for police and other services.

With little money to work with, Bono has scrambled for ways to promote the city. He has lined up corporate sponsors for many of the city's events, including Bank of America. He has also raised \$75,000 by selling T-shirts, post cards, and posters with his face and the slogan, I Want You, Babe. Still, not everyone is thrilled with the new mayor. "Sonny is

working hard, but he hasn't done much concrete yet," says former Vice-Mayor Eli Birer, one of the six candidates Bono defeated. "He's ignoring the reality that he has to cut spending."

WOODSTOCK REDUX? At Bono's urging the City Council approved funds to study building a multimillion-dollar complex with an amphitheater, horse-racing track, and championship golf course. And to capitalize on Palm Springs' popularity with students, who invade in droves during spring break, Bono is also hoping to organize a concert this summer to commemorate Woodstock's 20th anniversary. Then there's his plan for an international film festival, planned for January. If festival-goers fill the town's hotels and restaurants during its two-week run, the budget deficit will be slashed dramatically, Bono hopes.

Such optimism has aided Bono during a roller-coaster career. He and Cher scored in the 1960s with hit records and in the early 1970s with a top-rated TV variety show. But his career faltered after they divorced in 1974. While Cher's star soared, Bono had to settle for guest spots on shows such as *The Love Boat*. Even an Italian restaurant he opened in Los Angeles failed.

That was the bottom. Four years ago he moved to Palm Springs, where he lives with his 28-year-old, fourth wife, Mary, and their son, Chesare. And his new restaurant, Bono, grosses \$2.7 million a year and turns a profit, he says. Critics grumble that he's using his mayor's job to revive his show-biz career. "I'm sure gets his name around," says Birer. In fact, Bono seems to be in demand again, with a major role in the 1988 cult film *Hairspray* and a part in an upcoming Miller Lite commercial.

Bono denies taking his \$15,000-a-year city hall job lightly. For instance, he points to a recent appearance on NBC's *Late Show With Bob Costas* show on which he plugged his city's aerial tram and the nearby San Jacinto Mountains.

Bono doesn't yearn for a political career like fellow Republican Ronald Reagan. But for his remaining three years in office he has plenty of dreams to be realized. As he doesn't mind noting, he has made quite a comeback. He expects Palm Springs to do the same.

By Ronald Grover in Palm Springs, Calif.



'We're selling glamour,' says Mayor Bono. But critics grumble that he's using his job to revive his show-biz career



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EDITED BY TODD VOGEL

NCNB LOOKS HUNGRY —FOR MCorp

▶ NCNB has a relentless appetite. On Apr. 26, the day after it dropped its \$2.4 billion pitch for Citizens & Southern, Timothy P. Hartman, vice-president of NCNB's Texas subsidiary, said the bank would bid for institutions seized by federal regulators from failed Dallas-based MCorp. The Federal Deposit Insurance Corp. took over 20 of MCorp's 25 banks on Mar. 29 and needs a buyer. If NCNB wins, it could pick up assets of \$15.4 billion.

MCorp. could be easier prey than C&S. Chairman Hugh McColl Jr. retreated from his C&S bid after the Atlanta-based bank steadfastly refused to negotiate. McColl realized that NCNB, which last year bought failed First Republic Bank, couldn't spare the management time for a hostile battle. NCNB's stock has soared 50% on its acquisition of First Republic.

GM AND FORD ARE STUCK IN LOW GEAR

▶ Detroit's optimists are running out of gas. After months of building too many cars, GM and Ford finally trimmed production on Apr. 24. Most cutbacks are modest—reduction of overtime work and lengthening of summer vacations. But they may suggest more cuts later. A senior GM executive says that 1989 car and truck sales could slump to 14.8 million units, the lowest since 1984 and well below initial forecasts of 15 million to 15.4 million.

OLIVETTI AND DEC COZY UP

▶ It was a good news, bad news week for Olivetti. The good news came on Apr. 24, when Digital Equipment said the Italian company would supply its PCs in Europe. Al-

though DEC isn't saying how many units it will buy, the order helps Olivetti at a time when its position in Europe is under attack. DEC buys PCs in the U.S. from Tandy but chose Olivetti to get into the European market faster.

The DEC order, however, may not make up for business that Olivetti could soon lose. On Apr. 19, AT&T's chairman Robert E. Allen disclosed that the giant phone company is looking for another PC supplier in the U.S. AT&T, which has a 22% stake in Olivetti, bought 116,000 PCs from Olivetti last year, and the cancellation is another sign of increasing strain in their alliance. Among the candidates for the new business, says Allen, is Intel.

DREXEL TAKES A BIG BUY ORDER

▶ Times are tough on Wall Street, so big-league producers make quite a catch. Eager to become a major retail force, Primerica's Smith Barney Harris Upham bought 19 retail brokerage offices from Drexel Burnham Lambert on Apr. 25. The 500 Drexel brokers reaped \$150 million from 250,000 accounts last year. But "keeping them will be a big challenge," admits Smith Barney CEO Frank G. Zarb.

Many firms are eyeing Drexel brokers, whose \$400,000 individual annual commissions outpace the in-

NOW, YOU CAN REALLY THROW A TANTRUM

You know the feeling. That report you had been promised at 8 a.m. still isn't there by noon. And who's the fall guy in the boss's eyes? You, of course. It's enough to make anyone want to break something. What to do? Well, an entrepreneur from Brooklyn has found a way to release all those emotions without creating a fuss. Alex Carswell calls it the Stressball, a soft blue sphere that makes the sound of shattering glass when thrown against a wall or dropped. Carswell came up with the idea after fighting with his boss. A paperweight flew, a picture crashed. And an idea was born. You supply the anger. microchip and speaker inside produce the sound of flying shards.

Carswell has targeted executives who shop at toney department stores. He also figures it's a great Father's Day gift. No that family life could ever be a strain.



dustry. To stem the outflow, Smith Barney may pay up to \$500,000 in cash and upfront money to top brokers. The purchase will increase its sales force by roughly 20%.

EASTERN'S NEW FLIGHT PLAN

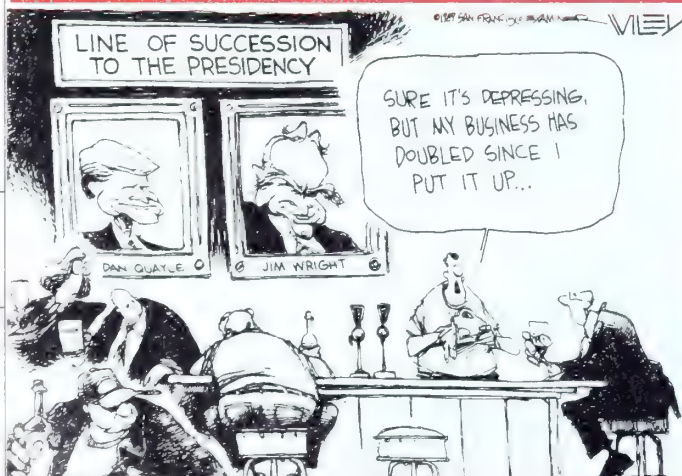
▶ Eastern Air Lines on Apr. 24 laid out its plan to fix up the wings of man. Eastern plans to keep 60% of its planes and employ 15,000 employees. To get aloft, it must scour a tight job market for an additional 1,500 new pilots or face possible liquidation.

The unions and the bankruptcy court still want a buy-

er to rescue Eastern. But faced with Texas Air's resistance, the court could force sale only by replacing Eastern's management with a trustee. The carrier's latest plan stalls this process. It also boosts the market position of Continental, Texas Air's other unit. Eastern plans to slash routes between the Northeast and Florida, where it competes with its sister carrier.

WOODSY OWL WINS A BIG ONE

▶ The U.S. timber industry took what could amount to a stunning setback on Apr. 24. Under heavy pressure from environmentalists, the U.S. Fish & Wildlife Service reversed itself and proposed that the northern spotted owl be listed as a threatened species. Pending final court rulings and agency reviews, the decision could reduce annual timber harvest from federal forests in Washington and Oregon alone by 45%, to 3.3 billion board feet. Under the worst-case scenario, the reductions could force layoffs of up to 50,000 workers. Congressional efforts are underway to strike a compromise between the industry and environmentalists.



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A FORTUNE 500 oil company is cutting the cost of sending voice and data between offices in San Francisco with a Northern Telecom ISDN phone system.

A major bank in Portland is using a Northern Telecom ISDN system to send transactions between headquarters and branches faster and more accurately.

A national telemarketer in Utah is answering more calls per minute with an ISDN system from Northern Telecom.

A telephone company in Chicago will use a Northern Telecom ISDN system to save businesses the cost of special cabling and terminals for data communications.

A multinational manufacturer in Rochester, New York, is making it less expensive to link offices and factories with a Northern Telecom ISDN system.

A Connecticut utility can automatically access and display a calling customer's records with a Northern Telecom ISDN system.

A pharmaceutical maker has linked its Northern Telecom ISDN system with its telephone company's to provide instant caller I.D. and high-speed fax communications between office sites in North Carolina.

A Florida real estate developer and the local phone company are working with Northern Telecom to offer America's first home ISDN service over optical fiber.

A telephone company has selected a Northern Telecom ISDN system to provide its customers in St. Louis with video conferencing and voice mail.

A long distance company in the Midwest estimates it can handle 15% more calls with an ISDN system from Northern Telecom.

A software company in San Jose has teamed up with Northern Telecom to provide the first ISDN products that communicate with IBM's Systems Network Architecture.

At the nation's first ISDN trial, in Phoenix, a Northern Telecom ISDN system proved that it speeds communications among a variety of terminals and computers.

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It's the new Subaru Legacy.TM The largest, most powerful Subaru ever built.

And if you can look beyond its gracefully sculptured body design, you'll find a wealth of

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Of course, what good is tremendous power without the ability to properly control it. According to the Legacy boasts such strong suits as a maximum stability suspension system, electronic automatic transmission for maximum efficiency, and standard 4-wheel disc brakes.

Furthermore, you can pur-

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ve system. For the ultimate in
ction control.

As exhilarating as the Legacy
on the road, it's equally impres-
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gacy takes all those cars that

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task. It not only provides more
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it provides it in a remarkably luxu-
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is also strength in numbers. Rather
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Finally, the Legacy continues

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new car that will help you avoid
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Subaru Legacy
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Until Now, There Were Good Reasons To Call Them 'Brief' Cases.

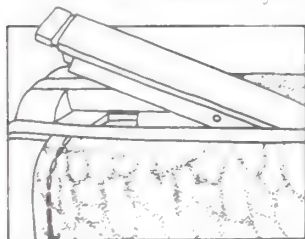
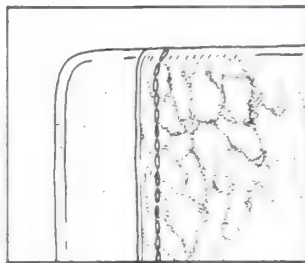
Because most briefcases that look and work great at first, stay that way for just a "brief" amount of time.

And cases that were sturdy and tough weren't exactly great looking. Until now.

Introducing the Samsonite® Classic. Proof that a briefcase can be both durable and attractive. And, briefly, here are some reasons why.

Our cover and detailing.

A briefcase shouldn't have to look like a tool box just to stand up to wear and tear. So we took a beautifully crafted covering, and wrapped it around our iron-tough case. And areas that get knocked around the most, like the corners and edges, are made from a sturdy yet stylish material that won't become frayed. The result is a briefcase you'll be proud to carry that can take a beating for a long, long time.



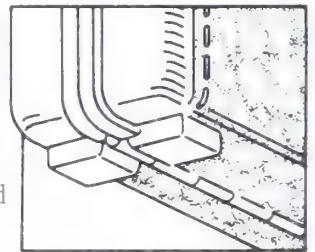
Recessed latches. Watching the contents of your briefcase fall down an escalator isn't exactly a great way to start a day. That's why our latches are recessed, making it hard for the case to pop open or have the latches knocked off.

You'll also have a special locking system. And, our exclusive patented right-side-up feature keeps you from opening your case upside down.



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While most briefcases have two small hinges, we gave our case a single long one to make it sturdier. The hinge runs the full length of the case and is designed to stand up to abuse—even if you overstuff the case.



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Our Strengths Are Legendary.

THE DEBT PLAN BRADY FLOATED IS STILL, WELL, FLOATING

When Treasury Secretary Nicholas F. Brady offered a new approach to easing the Latin American debt crisis, creditors and debtors both applauded. The new Administration had finally faced the futility of former Treasury chief James A. Baker III's strategy, which rejected the notion of large-scale debt forgiveness.

Seven weeks later, however, the cheers have died, replaced by growing skepticism. To whittle down the \$350 billion mountain of Latin debt, Brady called on banks to forgive some loans in exchange for binding guarantees that the rest of the money will be repaid. Japan will supply \$4.5 billion to bolster International Monetary Fund and World Bank assistance.

But progress has been slow, hampered by Treasury's failure to fill in the details. Brady aides say they've been vague because the U.S. can't impose a plan on banks, debtors, and creditor nations. And the funds to back debt reduction will be channeled through the IMF and World Bank, whose bureaucracies will have to write new rules. **'THE OTHER GUY'S COURT.'** Furthermore, Treasury is counting on debtors and creditors to work out the fine points as they go. Treasury Under Secretary-designate David C. Mulford rejects the notion that Treasury should "manage the relations between countries and banks for the next 30 years." Says Mulford: "We want to let the market function."

Mexico is the plan's first test. The IMF will advance Mexico \$3.64 billion, including more than \$1 billion available for interest and principal reductions on old debt. But the talks are stalled by uncertainty over just what deals will pass muster in Washington. As the parties jostle, says one U.S. banker, "everybody's trying to push the ball into the other guy's court."

There's always a way to meet Mexico's needs. American interest in the political and economic stability of its southern neighbor has always made Mexico a special case. And the country is a model debtor, especially since President Carlos Salinas de Gortari stepped up the pace of economic reform.

Elsewhere, borrowers and lenders alike wonder just how much the Brady plan offers them. Debtors' expectations for relief far exceed the limited cash available.

Like Baker before him, Brady makes aid conditional on economic reforms, and debtor nations question how far Washington will make them go to curb public spending and free up markets. Given the checkered histories of such major borrowers as Argentina and Brazil, Treasury and the IMF may have to swallow hard before rewarding them with debt reduction.

"There have been more nonperformers than performers," says Richard E. Feinberg, vice-president of the Overseas Development Council. "Does Treasury mean to say that the majority of countries won't get debt reduction?"

Bankers have many questions, too. "The private banks have not yet been brought into the picture—yet the onus is on the banks to make the plan work," says one debtor's top negotiator. Banks aren't sure just how much debt they are expected to forgive—or how regulators will treat them. The Securities & Exchange Commission is mulling accounting rules that would reduce the impact on bank balance sheets. But even if regulators let them off the hook, the banks are dubious about resuming lending to Latin nations at the same time that they are tearing up old IOUs.

And without new credit, developing nations' economies can't grow.

Brady gets credit for getting U.S. policy off dead center—and for making a virtue of necessity by hitting up the Japanese. "Without the Brady plan, we can't do anything," says Yoh Kurosawa, deputy president of the Industrial Bank of Japan Ltd. The proposal is the first attempt to combine America's cashless leadership with Japan's leaderless cash. The Japanese have done their share. Now, however, the Allies are waiting for America to provide bolder direction.

By Mike McNamee, with William Glasgall in New York and Amy Borrus in Tokyo



BRADY: A TEST IN MEXICO

CAPITAL WRAPUP

LOBBYING

This looked like the year that a broad coalition of banks, securities firms, insurance companies, accountants, and unions would succeed in paring back the Racketeer-Influenced & Corrupt Organizations Act. After all, Chairman Peter W. Rodino Jr. (D-N.J.), who had kept RICO reform bottled up in his House Judiciary Committee, had finally retired. But opposition to changing the law—particularly to repealing the provision that allows triple damages in RICO suits—has stiffened. The consumer groups fighting major revision have now been joined by state attorneys general and securities

and insurance regulators, as well as the Federal Home Loan Bank Board. With new Judiciary Chairman Jack Brooks (D-Tex.) lukewarm on the overhaul, RICO may survive unchanged.

FOREIGN AFFAIRS

Senate Democrats, annoyed at Bush's go-slow approach to changing U.S.-Soviet relations, are moving into the void. Foreign Relations Committee Chairman Claiborne Pell (D-R.I.) plans to take his whole panel to Moscow in June. And Chairman Sam Nunn (D-Ga.) is expanding the Armed Services Committee's foreign policy franchise by hiring Richard Combs, a former top U.S. diplomat in Moscow.

CONGRESS

The House may break with a long-standing tradition under which Congress exempts itself from the employment policies it imposes on the private sector and the executive branch. A bill drafted by the Administration Committee would give House employees up to 26 weeks of unpaid leave to care for newborn children or sick relatives. That's a lot more generous than the 15 weeks of leave required of private employers in legislation being pushed by Democrats over strong Administration opposition. The bill covering Congress may pass the House but the outlook in the Senate is uncertain.

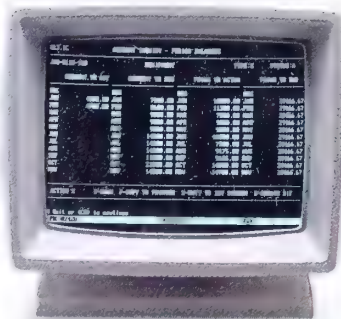


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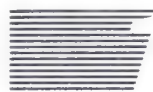


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CHINA'S NEXT GREAT LEAP COULD BE BACKWARD

As Deng flounders, party conservatives and reformers are battling for power

Oppose Dictatorship! Long Live Democracy!" yelled tens of thousands of rain-soaked, scruffy Beijing University students as they poured down Changan Avenue into Tiananmen Square. But the most important struggle was taking place behind closed doors. China's leadership is locked deep in crisis.

Only two weeks before paramount leader Deng Xiaoping is scheduled to host Soviet leader Mikhail S. Gorbachev in a historic rapprochement, the evidence is mounting that 84-year-old Deng is losing his grip on power. That is deepening a succession struggle between Deng's hand-picked successor, Communist Party leader Zhao Ziyang, and Prime Minister Li Peng, who is backed by conservative party elders.

LAST HURRAH. At stake is whether China continues down the path toward Deng-style reform and modernization or reverts to centralized, authoritarian control. Zhao stands for rapidly opening up China's economy and political system; Li wants to rely more on central planning, which could severely impinge on China's fast-growing coastal provinces, such as Guangdong and Fujian.

No one knows now which way the country will tilt. The Chinese leadership is sure to maintain the appearance of unity for the Gorbachev visit beginning May 15, but it could turn out to be Deng's last hurrah. His absence from key meetings and his silence seem to indicate a diminished ability to govern.

The succession struggle could climax as the party's Central Committee prepares for a long-delayed plenum meeting in late May or early June. Conservatives, led by Li, may try to oust Zhao from office at the coming plenum. But Li also seems weak, because he hasn't responded to the student challenge. That, however, may now be changing. On Apr. 25, the party's Politburo held an urgent

meeting. Although most foreign ventures have government guarantees, they could be affected if their Chinese partners are squeezed for raw materials or currency. Those operating out of Hong Kong might also feel a backlash. The British colony will revert to Chinese control in 1997, and Deng's reformers have promised to guarantee its future as a capitalist enclave. But conservatives might

think otherwise and want a far tighter grip on the prosperous city.

GRIEVANCES. The students want a sort of reform. Their immediate reason for demonstrating was to force a reappraisal of the disgraced reform leader Hu Yaobang, who died on Apr. 15. Hu tried to loosen party controls in favor of more democratic socialism but was forced to resign in 1987. His death erased the hope among some students that Hu might stage a comeback and put China on a solidly reformist course. The students also are demanding details of the Chinese leadership's private financial dealings, a freer press, and more money for education. In effect,

they are challenging the very authority of the Communist Party.

Although less than 1% of the population, students are highly influential in Chinese politics, especially at times when leadership corruption becomes an issue. Some street sloganeers, for example, shouted: "Let Tzu Hsi retire!"—a daring comparison of Deng with the Empress Dowager Tzu Hsi, a corrupt symbol of China's last imperial dynasty.



meeting to discuss a possible crackdown on the unrest.

The leadership's worst fear is that the students might draw the support of tens of millions of workers. If that were to happen, the government would face a decision to repress strikes with troops or give workers more economic benefits, risking extreme inflation.

Foreign investors both in and out of China could also get caught up in the

Deng's reforms have floundered in the past four years for lack of political will and his inability to control the money supply and prices. Prices have been frozen, and changes in the economic structure have not been thorough enough to sustain earlier gains, when China was growing at a rate of 11% annually. One result has been chronic energy and material shortages.

Grain production, beset by inflated seed, fertilizer, and equipment prices, as well as corrupt middlemen, was down in 1988—the fourth disappointing year in a row. More than 2.5 million people flooded into affluent Guangdong Province, next to Hong Kong, earlier this year, in scenes reminiscent of the food crises of imperial times. "I'm not an alarmist, but this could be a source of major unrest," says Byron Weng, a political science lecturer at the Chinese University of Hong Kong.

MILLIONAIRE CADRES. Also putting pressure on jobs, land, and food is unremitting growth in China's population, which hit 1.1 billion a few weeks ago. Inflation has reached levels not seen since before the 1949 Communist takeover and far exceeds the admitted level of around 20%. Even the wage benefits of Deng's decade of double-digit annual growth are gone, eaten away by inflation and pervasive corruption.

In this environment, Deng's slogan, "To Get Rich Is Glorious," has soured for the ordinary man watching his party bosses enrich themselves and become what the students call "millionaire cadres." Deng's son, Deng Pufang, was recently exposed for dicey business practices. Zhao's son operates a profitable business on the southern Chinese border. State factory bosses run private operations on the side. Kindergarten administrators demand bribes from parents. "The crisis is the authority of the state and the unwillingness of society to accept what the state says," says Frederick MacFarquhar, director of the Fairbank Center for East Asian Research at Harvard University.

If the students can spread their disaffection to millions of urban workers, it would be a crippling blow to a party that claims its legitimacy comes from "the proletariat." The students are trying to do just that by fanning out to factories to recruit workers and passing out pamphlets to commuters. Beijing city government ordered all factories not to allow workers to strike in sympathy with the students, and more than 10,000 troops have been transferred to the capital in preparation for a crackdown. That move could come when the students hold May 4 rally. But even if the student protests are stamped out, the underlying crisis can only deepen.

By Dinah Lee in Hong Kong



DRAMATIC DEPARTURE: MURDERERS AMONG US IS A U.S.-BRITISH-HUNGARIAN CO-PRODUCTION

HOW DO YOU SAY THIRTYSOMETHING IN FLEMISH?

The transition to truly global television won't happen easily

The scenes in Cannes, France, ranged from the sublime to the ridiculous. There, among the palm trees that shade the seaside resort's famous promenade, were huge posters promoting American television productions from rodeos to Barbie Doll cartoons. The display wasn't meant to impress the chic vacationers. It was for the thousands of international TV programmers and producers who descend on Cannes each year to buy and sell shows.

American producers anticipated that this year's meeting, which began on Apr. 21, would be particularly lucrative: Several new commercial TV channels are opening in Europe, and they desperately need material to fill their airtime. The expectations were fulfilled—there was an abundance of deals for hot American programs. But there also were words of warning. American producers, networks, and distributors are learning that the road to globalization has potholes.

One of the more immediate concerns is that the hot demand for Hollywood programs could fizzle if some of the new program services fail. In Britain, for example, few see a sufficient market to support both Rupert Murdoch's Sky Television and a proposed competitor, British Satellite Broadcasting. BSB still must raise some \$600 million before its fall launch.

What's more, European governments want to be sure that the friendly American embrace doesn't become a suffocat-

ing bear hug: Quotas on non-European programs are due to go into effect. Some producers are forming Euro-American alliances to get around the quotas. But the partners often find it difficult to resolve differences in language, culture, and egos. "Things are terrific for us, right now," says Michael J. Solomon, president of Warner Brothers International. "But it's not heaven forever. I would hate to project five years out."

LOSING SHARE. Americans will keep plugging away in Europe, though, because producers need new audiences. As the Big Three networks lose market share to cable and independent stations, they want to cut their costs for movies and TV series. That has sent producers scrambling to find additional buyers. "We always used to look at the foreign market for incremental sales," says Henry S. Schleiff, senior vice-president of Viacom Inc. "Now, it's that market which allows you to produce for the U.S." Viacom is already selling MTV in Europe and plans to take its children's channel, Nickelodeon, overseas.

European producers have their own reasons for teaming up with the Yanks. American movies and TV shows are still the only ones that regularly appeal to viewers everywhere. The hopes for creating a "pan-European" product that sells across borders is regarded as fanciful. A growing number of European programmers realize that they'll only succeed in the world market once they learn



History is full of giants who couldn't adapt.

In the history of telecommunications AT&T has long been the giant. But recently the environment has changed. As a result of today's open marketplace, for the first time, the giant is facing real competition.

We're ITI, and we're among the fastest growing companies in the telecommunications industry. In the past, when only one company could provide long distance operator services, you received whatever they chose to provide.

Now, ITI offers you a whole new world of innovative operator services, while the giant continues to lumber along.

Unlike the giant, we can respond to your special needs quickly and efficiently. That means when you need multilingual operators, we have them now. When you need message forwarding, we offer it now. We listen. And we are committed to keep listening.

So whenever you choose an operator services company, remember: size isn't everything. In the end, it's the smarter, quicker guy that prevails. That's how evolution works.



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what works in America. "Instead of looking to make literature on TV, we ought to try to find some good 'B' series and spaghetti westerns," says Carlo Freccero, who has worked as a programmer in French and Italian television.

OCCASIONAL WINNERS. For all the talk at Cannes about joint ventures, it's difficult to find properties that appeal to audiences on both sides of the Atlantic. Europeans have long enjoyed American game shows, soap operas, and thrillers, but Americans will only tolerate sprinklings of foreign flavor in their TV fare. The occasional winners tend to involve major historical events and feature well-known actors. CBS Inc., for example, wouldn't join Britain's Thames Television PLC to fund the miniseries *Jack the Ripper* unless earlier shooting was scrapped, and a big star—in this case,

Michael Caine—was cast for the lead.

Several producers are plowing ahead, however. One of the more ambitious joint efforts is for a production of *Murderers Among Us: The Simon Wiesenthal Story*, featuring British actor Ben Kingsley. The \$8 million movie is being funded on the U.S. side by Home Box Office Inc. and Citadel Entertainment, and overseas by Britain's TVS Films and Hungarian Television.

Although the Big Three television networks shy away from shows with an obvious foreign touch, they're eager to establish their own business footholds overseas. ABC-TV has taken a stake in West German broadcaster Telemünchen and hopes to pick up holdings in three more producers this year. NBC Inc. has made a substantial investment in an Australian programming company, QIn-

tex Entertainment. The network has also designated Australia's Network 7 and New Zealand's TV 3 as its first overseas affiliates. CBS, meanwhile, is acquiring distribution rights in markets outside the U.S. and Europe for programs made by a fledgling, seven-country European production company. Among the show CBS will handle is *The Manageress*, a story about a woman manager of a British soccer team, and a police series called—appropriately—*Eurocops*.

Developing a production company that is truly stateless and able to sell its scripts around the world may be an impossible dream. For many of the Americans and Europeans who met in Cannes, however, the prospect of earning huge profits makes the dream too tempting to abandon just yet.

By Richard A. Melcher in Cannes

JAPAN

MOTOROLA IS POUNDING ON JAPAN'S 'OPEN DOOR'

It's charging protectionism—and may get the U.S. to impose new tariffs

When Motorola Inc. unveiled the world's smallest portable telephone in Tokyo on Apr. 26 (page 114), the Japanese crowd couldn't miss the irony. "Now you can talk to anybody, at anytime, anywhere," declared Nippon Motorola Chairman Toshiaki Irie. Just about anywhere but Tokyo, that is. Under Japanese regulations, Motorola may not sell its portable phones for use in the capital or the city of Nagoya. And they account for 60% of Japan's \$720 million cellular phone market.

Motorola contends that Japanese protectionism has blocked its path into Japan's booming cellular phone business, a complaint that could become a test case in U.S.-Japanese telecommunications trade. It has pleaded its case with U.S. Trade Representative Carla A. Hills, who must decide in May whether trade practices by Japan and other countries warrant retaliation under 1988 trade laws. If Hills says Motorola's complaint is justified, the U.S. could slap tariffs of up to 100% on imported Japanese cellular phones.

GUARDED TALK. Motorola's complaint illustrates the twists and turns that a foreign company faces as it expands in Japan. Back in 1985, Japan moved to end

the monopoly held by Nippon Telegraph & Telephone Corp. The postal ministry, which regulates the phone industry, set aside a 10 megahertz slice of airwave bandwidth for newcomers to the cellular phone business. After years of building phones to NTT's specifications, Motorola teamed up with a new company, Daini Denden Inc., for a major push. Motorola



FORBIDDEN CITY? A TOKYO MOTORIST ON HIS CELLULAR PHONE

would sell its cellular phones to DDI, which would lease them to customers.

But then the ministry changed signals. Instead of opening all of Japan to Motorola, it split the country in half. Motorola got the western part, while the lush Tokyo-Nagoya market went to Japan Mobile Communications, which is controlled by Toyota Motor Co. When

Motorola protested, Japan compromised. Motorola could attach adapters to its phones so they could be used in Tokyo. But the adapters only work on car phones, while 90% of the customers use portable phones on the train.

Now, Motorola claims that Japan is violating a 1986 U.S.-Japan trade pact on telecommunications. The pact guarantees "mutually advantageous marketing opportunities." Instead, Motorola argues, it is effectively locked out of both the cellular phone and two-way radio business in Tokyo. The company wants the ministry to open up new bandwidth so its customers traveling to Tokyo can use their phones without adapters. But postal officials say the airwaves are too crowded. "Opening up new frequencies in Tokyo is tantamount to licensing a whole new company," protests Kazuyuki Aoki, postal ministry director.

LONG WAIT. With the U.S. close to imposing trade sanctions, Japan is scrambling to head them off. It has offered to include U.S. companies in projects for the next generation of radio communication. And in switching to the new digital system, Japan will adopt international standards, giving all companies an equal crack at the cellular market.

But these products are years away. Meanwhile, Motorola claims that it could miss more than \$2 billion of phone and two-way radio sales in Japan over the next 10 years. If Japan doesn't relax its grip on the airwaves, Motorola is likely to intensify its pressure on the U.S. to act now.

By Neil Gross in Tokyo, with Lois Therien in Chicago and Paul Magnusson in Washington

Not a common garden variety.



The inner surface of the pitcher plant is so smooth that it offers a fly nothing to grab onto. It quickly slides down to meet its fate.



The surface of Schott's laboratory glassware is just as smooth and acid-resistant as the inside of the pitcher plant.

Life is tough for plants in Borneo. The tropical rain forest provides them with little nourishment. They can supplement their diet with insects, but how can they stalk their prey when they're rooted to the spot?

_____ Nature has come up with the solution. These normally green plants have developed colorful pitcher-shaped leaves. Many insects can't resist them, but as soon as one lands on the edge, it slides down into the acid secretion at the bottom. This acid is strong enough to digest the bug, but doesn't damage the plant itself.

_____ Schott's "Duran" laboratory beaker has more than looks in common with the pitcher plant. It too has a non-porous, ultra-smooth surface. Even minute particles will not adhere to this special glass. And corrosive chemicals have no effect on it.

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IS BUSH LOSING THE STRUGGLE FOR EUROPE'S HEARTS AND MINDS?

Mikhail S. Gorbachev's campaign to persuade West Europeans of Moscow's peaceful intent is rapidly dispelling the deep fear of Russia that has held NATO together. His success, especially in West Germany, threatens to erode U.S. leadership of the alliance and cast President Bush in the role of foot-dragger, rather than orchestrator, of a growing East-West détente.

Bush had hoped to capture the political initiative from Gorbachev by emphasizing shared Western values, such as democracy and market freedom, rather than focusing narrowly on arms and security at NATO's 40th anniversary meeting in Brussels in late May. But West German Chancellor Helmut Kohl has upset that scenario by suddenly calling for urgent talks with the Soviets to thin out short-range nuclear missiles in Central Europe. Kohl sent Foreign Minister Hans-Dietrich Genscher and Defense Minister Gerhard Stoltenburg on a hasty trip to Washington on Apr. 24 to convey Kohl's plea for such negotiations. They were rebuffed in plain language: One high-ranking U.S. official says it would be "folly" to consider reducing such weapons without first knowing what conventional-arms cutbacks will be made at the East-West talks that started in Vienna on Mar. 6.

NATO RIFT. Kohl, however, may have little choice but to persist in his effort. Otherwise, he fears, his coalition government's political base will be undercut by rising antinuclear sentiment and growing eagerness for détente among West German voters, who see themselves as the likely victims of short-range nuclear weapons fired from either side of Europe's East-West divide. The resulting rift in NATO may be papered over but is unlikely to be resolved at Brussels.

For Bush, Kohl's move also upstages the President's own plan to renew START negotiations with Moscow on deep cuts in long-range nuclear missiles. Bush laid the groundwork for these talks in a recent agreement with congressional Democrats on proposals for mobile deployment of two types of

missiles. Although the scheme may still face a battle in Congress, the basic aim is to enable Bush to negotiate deep cuts in strategic arms by making sure that the core of the U.S. land-based nuclear deterrent is safe from surprise attack. This would be achieved by moving the 10-warhead MX around on railcars and the single-warhead Midgetman on trucks.

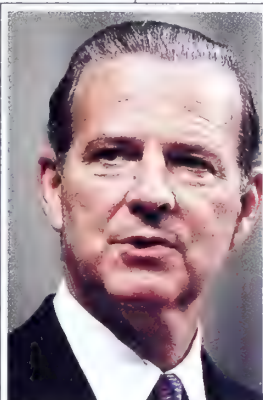
The Administration, however, insists that holding talks with Moscow now on reducing short-range missiles would play to Gorbachev's strategy for achieving a denuclearized Europe.

For decades, NATO has considered short-range nuclear weapons essential to offset the lopsided Soviet advantage in tanks and other nonnuclear forces in Europe. Speaking in Parliament, British Prime Minister Margaret Thatcher reminded Bonn of NATO's "vital role in maintaining Germany's freedom." But other NATO members such as Italy and Belgium back Kohl. To relieve Kohl's political worries, the U.S. and other allies have eased earlier pressures on the Chancellor to allow the modernization of 70 U.S. Lance short-range missile-launchers in West Germany. Most West Germans oppose modernizing them, and Kohl wants to put off a decision on the issue until after Germany's 1990 elections.

Bush had hoped that the accord on mobile missiles would allow Secretary of State James A.

Baker III to set a date for resuming strategic missile negotiations when he visits Moscow on May 10. That would reassure allies who have been fretting that Bush's leisurely review of East-West relations might signify a U.S. intent to slow down the arms talks. And at the NATO meeting, by stressing common Western values, Bush hoped to counter Gorbachev's call for a "common European house" in which U.S. influence would be diminished. But with Bonn and Washington at loggerheads, the Brussels gathering may highlight growing divergences within the Western alliance instead.

By Bill Javetski and Dave Griffiths in Washington, with bureau reports



BAKER: MOSCOW-BOUND

GLOBAL WRAPUP

JORDAN

Riotous protesting price hikes forced Prime Minister Zaid Rifai to resign on Apr. 24, shortly after King Hussein's return from a visit to Washington. But Palestinians, who make up more than half of Jordan's population, kept out of the disturbances, thanks partly to Palestine Liberation Organization leader Yasser Arafat and his mainstream PLO faction, Al-Fatah.

Radical PLO groups had urged followers to join the protests, hoping to escalate the disturbances into a Jordanian version of the *intifada*, or uprising, on the West Bank. But Fatah spread the word to Palestinians in Jor-

dan to stay off the streets. Arafat wants to avoid making trouble for Hussein for fear of undermining the PLO's credibility in moves toward an Arab-Israeli settlement.

SOUTH AFRICA

Theft has done more than Western sanctions, a South African editor complains, to harm the country's finances. Foreign exchange reserves dropped \$500 million, to \$1.9 billion last year, forcing Pretoria to curb imports and hike interest rates. More than half the drop, the South African Reserve Bank has disclosed, was due to fraudulent and corrupt foreign exchange transactions.

Albert Vermaas, a businessman who wine and dined Defense Minister Magnus Malan and Foreign Minister Roelof Botha, has been charged with illegally exporting \$40 million, although an official inquiry has cleared the ministers of wrongdoing. Another businessman, Stuart Pegg, is being sought by police to explain his role in a case where a bank was defrauded of \$18 million, which was sent abroad. Pegg is believed to be in Europe.

Many businessmen oppose South Africa's exchange controls and resent seeming official favoritism in approving requests to buy hard currency. Now they are asking whether Pretoria is able to police the system.



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Commentary/by Howard Gleckman and Richard Fly

THE BUSH PRESIDENCY: CAUTIOUS TO A FAULT

Normally, a new Administration's opening days are filled with the buzz and bustle of bright hopes and eager policymaking. But Bush's Washington is in the grip of a curious languor. The new President's official pronouncements are sparse. Those that he delivers rarely make the front pages or the top of the TV news.

Some 100 days into his term, Bush has replaced Ronald Reagan's Imperial Presidency with a style so cautious and subdued that it could damage the new President's effectiveness.

To be fair, Bush's leadership style is vastly different from that of his predecessor. He's a Washington insider, a conciliator by nature, and he makes no pretense of having a grand governing vision. What's more, he didn't seek office promising to shake things up, reckoning that America wanted only marginal changes in Reagan's conservative policies.

'AMBIENT NOISE.' But Bush's tentative, reactive approach is beginning to worry even some of his ardent supporters. Says one Republican activist: "The White House is trying to make a virtue of this laid-back style. The big worry is that, so far, Bush has just been ambient noise to the events that have gone on." Reagan had a rare ability to command the stage. But he also had a guiding set of ideological principles that the pragmatic Bush seems to lack. "Are we tacking or are we drifting?" asks Jerry Jordan, a former economic adviser to Reagan. "Maybe there is a grand strategy. I don't know what it is. I don't think they know."

A particular concern is Bush's aversion to political confrontation. Reagan loved to tilt with the "tax-and-spend liberals" in Congress. Bush shrinks from such conflict. "I don't think Bush wants to be bold, wants to get out there and fight," says GOP analyst Kevin Phillips. "That's not his style."

Bush sees himself as the Great Negotiator, forced to deal with solid Democratic majorities in the House and Senate. But his tireless schmoozing with Washington power brokers may exact a price. Says Gary L. Bauer, a former White House policy aide: "Faced with an Administration that is willing to constantly split the differ-

ence, an assertive Congress will push harder and harder to drive policy."

In the rare instances when Bush has departed from his aim-low style, the results have been encouraging. The Treasury Dept.'s sweeping plan to clean up the savings and loan mess (page 122) is well on its way toward congressional approval. But elsewhere the record is one of missed opportunities. Some examples:

■ The manana deficit plan.

Although Bush sounded very Reaganesque on the subject of the budget deficit during the campaign, he decided after the election that a serious assault on the red ink would lose him some of his newfound friends on Capitol Hill. So he opted for a no-pain budget accord that relies heavily on specious spending cuts and phantom revenues—and puts off tough action until next year.

Some in the Administration believe that after a year of mutual back-scratching, Bush and the Hill will have built up enough trust to take stronger measures, including tax hikes and entitlement reforms. But budget experts say that by waiting, Bush has given up his single best shot at achieving spending discipline. Nor has he set a stellar example, because the pact he has just agreed to permits domestic spending to rise by more than \$6 billion above Bush's own budget.

In addition, the notion that this year's budget wimp-out will make meaningful action more likely next year is odd. Midterm elections will make Congress less willing to trim domestic programs. And there's no sign that Bush will be more flexible on his no-tax pledge. "The budget deal is basically a fraud," says William Niskanen, head of the conservative Cato Institute. "It increases the problems of reducing the deficit in future years."

■ **No pain, no gain.** Bush is doing plenty of talking about his campaign pledge

to cut the tax rate on capital gains. But the follow-through required to give the controversial proposal a fighting chance has been absent. Senate Finance Committee Chairman Lloyd Bentsen (D-Tex.) was sympathetic. But when the Administration sent a low-level aide before the panel to testify on the plan, Bentsen quickly lost interest.

The White House also got bogged



down in a no-win battle over whether the capital-gains cut would raise or lose revenues. After failing to convince legislators that the plan would increase revenues, Bush is now trying to sell the idea to Congress as a way to spur investment. But the plan has been indelibly stamped as a "giveaway to the rich."

■ **Those elusive Brady plans.** Early on,

Bush and Treasury Secretary Nicholas F. Brady made a cause célèbre of the notion that debt-financed leveraged buyouts were harming the economy. But when Congress asked for solutions, the Administration seemed to lose heart. Brady blandly called for further study of the matter, at which point much of the steam went out of the congressional drive to curb LBOs.

Timidity has also undermined Bush's new international debt strategy (page 51). In March, Brady suggested that the Administration might countenance the idea of debt write-offs by Latin nations. But the plan was maddeningly vague, and it took the White House nearly a week to embrace it. Meanwhile, Brady seemed to undercut prospects for his own proposal when, react-

its damage assessments, the spill was out of control. One reason for the delay: agonizing over whether a heightened federal role in the cleanup was appropriate. Now Bush's hopes of becoming Mr. Environmentalist have ebbed. He has become so wary of the issue that he canceled scheduled West Coast appearances intended to highlight his concern for the environment.

■ **The foreign policy slowdown.** No one begrudges Bush the opportunity to reassess the direction of U.S. foreign policy. But there are fears that the Administration's four-month "strategic review" is mainly intended to bring new policymakers up to speed and counter Soviet leader Mikhail S. Gorbachev's blitz of peace initiatives. And while Bush marks time, Gorbachev is rushing full speed ahead and gaining converts to his scheme to cut nuclear weapons in Western Europe. For instance, West German Chancellor Helmut Kohl is backing away from NATO plans to modernize short-range nuclear missiles, a rift that threatens the stability of the Western alliance (page 61).

There may be an even bigger danger. An implicit notion underlying the strategic review seems to be that Gorbachev's tenuous political grip will force him to make ever-larger unilateral concessions. But as the recent shakeup of the Communist Party's Central Committee demonstrates, Gorbachev may rapidly be consolidating his position. Some critics worry that if Bush continues his standoffish approach, at some point Gorbachev will tire of further concessions. In that event, Bush's hesitancy could cost him the best opportunity in 40 years to recast the East-West conflict.

The Bush crew also appears to be playing for time elsewhere. Bush is still identified with Reagan's hardline Central American policies, which sought to support anticommunist insurgencies in the region. Bush has responded to dwindling public and congressional support by groping for another course. Cutting a deal to provide nonmilitary aid to the Nicaraguan *contras*, for instance, bought him time to build support for a more moderate policy. But Bush has yet to articulate what the new policy is.

In some ways, Bush's willingness to move slowly is understandable. Recent polls show that a solid 60% of the public think that the President is doing a good job, though they don't view him as a particularly strong leader. "Frankly, I don't think it's important whether the voters think he's leading in a bold or not-so-bold manner," says Bush's pollster, Robert Teeter. "The country is in good shape. We've got the lowest unemployment in 15 years, the longest peacetime economic recovery, and no international crisis."

Moreover, Administration partisans insist that it's not fair to judge Bush by the traditional yardstick of a first-year burst of Presidential activity. "The first quarter has gone quite well," insists White House Chief of Staff John H. Sununu. With the exception of the Senate's rejection of John G. Tower as Defense Secretary, Sununu says that "everything has been on target."

SECOND WAVE. Because Bush wants to take time to distance himself from some elements of Reaganism, aides predict that his Administration won't really catch fire until after his first year. "Most Administrations start high and go down from there," says one Bush insider. "This one will be the reverse. Bush isn't a visionary or a conceptualizer, but slowly and steadily, he gets there."

Political scientists scoff at this notion of a "second wave." Presidents have historically enjoyed their greatest influence in the months following their election. "The first six months are critical," says Norman J. Ornstein, of the American Enterprise Institute. "You don't have to come up with every one of your proposals, but you want to create the perception that you're in charge. The problem with the methodical approach is the risk of being outdistanced by events and others' political aggressiveness."

Indeed, while Bush bides his time, carefully studying his options and reveling in such folksy pursuits as pitching horseshoes, others are rushing to fill the policy vacuum. Congress, in particular, is moving to set the nation's agenda—which should be a fairly horrifying thought to any occupant of the White House, even someone as mellow as George Bush. "While the White House is inactive, Congress is very active," says one Republican strategist. "What you have is the Zen Presidency—the sound of one branch clapping." Adds William A. Galston, a University of Maryland policy expert: "The Administration is being too cautious, too pessimistic, and too unimaginative." The message to George Bush: Be bold.

BUSH'S CAUTIOUS BEGINNING

CHALLENGES FACED...

RESCUE After a false start, the Administration plotted a tough plan to bail out S&Ls. It is now trying to herd the plan through Congress.

REAL AMERICA Bush acted quickly on *contra* aid, an issue that had bogged down Reagan Central American policy. He gave up military aid in exchange for congressional support for humanitarian assistance.

WORLD DEBT The Administration shifted direction and plan to effectively forgive some debt. But the plan, is still sketchy, has little credibility so far with the developed or industrialized nations that must bankroll it.

...AND SKIRTED

DEFICIT Bush could have won a major deficit-reduction deal with Congress and put Washington's endless budget bickering behind him. Instead, he settled for another "blue chip and mirrors" plan that puts off tough decisions and leaves the deficit even more intractable.

COMMENT Officials waited two weeks before reacting to the Alaska oil spill, damaging Bush's hopes of being seen as an environmental champion.

REAL GAINS Cutting capital-gains taxes was a key plank of the Bush campaign. But in the face of early congressional opposition, the Administration seemed to back away from the plan. It is now trying to regain the initiative.

ing to initial criticism, he downgraded the scheme to an "idea."

■ **Indecision.** The key test for any President is his ability to respond to the unexpected. Bush has had a couple of opportunities, but has floundered. Case in point: the environmental disaster unleashed by the grounding of an Exxon Corp. oil tanker off Alaska. By the time the Administration completed

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1987



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A CUP OF JELL-O, VELVEETA TO TASTE...

Mike Miles looks for the right recipe at Kraft General Foods

During last fall's marathon negotiations with Kraft Inc., chain-smoker Hamish Maxwell didn't light up even once. The Philip Morris Cos. chairman had his eye on more than Kraft's shelf of top food brands. Maxwell also wanted President Michael A. Miles—Kraft's marketing whiz and a fervent antismoker—as part of the \$12.9 billion deal. After the acquisition, Philip Morris combined Kraft with its own sluggish General Foods Corp. operation, and Maxwell recently tapped Miles to run the new empire.

The marketing potential at Kraft General Foods Group is enormous. The \$22.5 billion subsidiary is the second-largest food company worldwide, behind Nestlé,

and sells 14 of the top 50 U.S. food brands, including Velveeta and Oscar Mayer. Altogether, KGF pockets 10¢ out of every dollar Americans spend on packaged food. Advertising and promotion spending in 1989 will approach \$2 billion. With weight like that to throw around, says one management consultant, "this company has the chance to change the rules of competition."

WEAK COFFEE. Maybe so. But Miles, 49, must change some of his own rules first. While his detail-oriented, hands-on style paid off in some big marketing coups at Kraft, insiders say he will now have to learn to delegate authority. He will need to make sure that executives at both companies collaborate on product devel-

opment, marketing, and distribution without letting KGF's sheer size and bureaucracy slow its response to market place changes. And if Miles is too eager to achieve short-term goals, such as reducing Philip Morris' \$10 billion in acquisition debt, he could hurt KGF's ability to compete down the road. That's not an idle worry: After Kraft agreed to the buyout, Miles hiked the 1989 profit targets for each brand an average of 5% to help pay down debt. The higher goal forced some brand managers to trim ad and promotion spending, say insiders.

Still, such a quick move reflects Miles's management style. The former Leo Burnett Co. ad agency staffer is known for involving himself in decisions usually handled by junior executives. Miles regularly made suggestions for ad campaigns—often with good results. At his urging, for example, Kraft stressed health concerns in ads for Light 'n Live yogurt. Unit volume jumped 15% last year, double the category's growth.

Now, Miles must come up with fixes for some troubled KGF brands—in particular, such longtime General Foods underachievers as Maxwell House coffee and Post cereals. But with 3,000 items to oversee, Miles is already starting to loosen the reins. He was conspicuously absent during ad agency presentations for the \$50 million Maxwell House account in early April, even though the brand lost \$50 million last year. "He senses the need to step back," asserts a former Kraft executive.

Instead of getting too involved in the nitty-gritty, Miles is now looking for marketing synergies at the two companies. In April, he consolidated KGF's estimated \$300 million worth of network and cable television advertising purchases at one agency, D'Arcy Masius Benton & Bowles Inc. Meanwhile, brand managers are shuttling between Kraft headquarters in Glenview, Ill., and GF's home base in White Plains, N.Y., to swap secrets on marketing and food technology.

BREAKFAST BLITZ. The cross-fertilization will soon bear fruit. The first major joint KGF campaign may run this summer. Pitching the "Great American Breakfast," the company plans to blitz consumers with coupons in Sunday newspapers and set up in-store displays. Kraft's Philadelphia Brand cream cheese and Lenders bagels and General Foods Maxwell House coffee and Post cereal.

Such mixing and matching has also spread to product development. With hefty combined research and development budget of \$200 million, Miles expects new ideas that combine the best of both companies. Minute Ri-



SYNERGY IN THE SUPERMARKET

	DRY GROCERIES	REFRIGERATED FOODS	FROZEN FOODS
KRAFT	Miracle Whip Kraft Salad Dressing	Velveeta Breakstone's	Frusen Glädje Budget Gourmet
GENERAL FOODS	Post Cereals Minute Rice	Oscar Mayer Louis Rich	Jell-O Pudding Pops Birds Eye

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The tools to take charge.

brand managers offered advice to Kraft's Blue Box group on its 18 dry-packaged potato, pasta, and rice side dishes. And the company recently folded General Foods' Culinova refrigerated entrées and side dishes into Chillery, Kraft's refrigerated line.

Miles must focus on more than marketing and product development, though. He'll have to make some major changes in operations, including consolidating some of KGF's 200 plants and 70 distribution centers. And General Foods and Kraft spent \$8 billion on packaging in 1988. If KGF cuts that cost a mere 1%, or \$80 million, it will add 20¢ a share to Philip Morris' results, figures Lawrence Adelman, senior vice-president at Dean Witter Reynolds Inc.

Such benefits from the merger will begin to show up soon on the bottom line. KGF's 1989 operating profits will grow 10%, to \$2.2 billion, on a sales jump of 7%, to \$24 billion, Adelman says. The unit will contribute 31% of the parent's total operating income of \$7.1 billion and 52% of total sales of \$46.2 billion, he estimates. Philip Morris' other divisions are Miller Brewing and tobacco.

FREEZER DYNAMICS. In time, Miles, who will succeed John M. Richman as KGF's chief executive next year, may decide a complete restructuring is in order. Some insiders speculate that Miles will group all KGF refrigerated products into one unit and dry-grocery brands into another. But nothing has been decided yet, according to Miles Marsh, president of General Foods U.S.A. "If it was easy to do, one can assume it would already have been done," he says.

There's good reason to make the effort, though. By combining its brands and sales forces along broad product lines, KGF might win greater clout with retailers—something its sheer size hasn't achieved so far. For instance, the company couldn't persuade Chicago-based Jewel Stores to display its new Blue Box dishes together instead of in separate aisles for rice and pasta.

Now, in what could serve as a test case, Miles has combined the Kraft frozen food lines such as Tombstone pizza and Sealtest ice cream with GF's Jell-O Pudding Pops and Bird's Eye products. As a result, says a management consultant, "the company leapt from two minor players in frozen to one major player." Adds Thomas Herskovits, president of the frozen foods unit: "If we can become experts of the freezer section, that will give us a competitive advantage." If Miles can get an edge like that for Philip Morris' food giant, he'll just about guarantee that future meetings with his boss will be smoke-free.

By Lois Therrien in Glenview, Ill.

WHY CELESTIAL SEASONINGS WASN'T KRAFT'S CUP OF TEA

At Celestial Seasonings Inc., the Boulder (Colo.) herbal tea company, bicycling is an article of faith. President Barnet M. Feinblum pedals a company Univega racer, and Celestial started a top pro cycle race, the Red Zinger, named after one of its teas. Bicycling, Feinblum felt, appeals to health-conscious herbal tea drinkers.

No wonder trouble started brewing when Celestial's then-owner, Kraft Inc., ordered the company to cut its ties with cycling three years ago. In-

stead, Feinblum, already chafing under Kraft's restraints, signed a deal with bicyclist Greg LeMond to ride on Celestial's team, then announced it to the public—and Kraft—at a press conference. "If I'm going to be insubordinate, I'm going to do it in a big way," he chuckles.

BEEF ZINGER? Such culture clashes helped push Kraft to put the company on the block, and Feinblum took it private in a leveraged buyout last November. Of course, Celestial is a quirky company that might have had trouble fitting into any food giant. But the events leading to the split offer some insight into Kraft's management style.

At first, Celestial thrived under Kraft. Mo Siegel, a health food store operator, founded Celestial in 1969 by blending herbs he picked in the Colorado mountains. He sold the company to Kraft in 1984. Kraft helped increase Celestial's supermarket shelf space and boosted its ad budget tenfold, to \$6 million. Sales increased 50% in the four years Celestial was part of Kraft, to \$40 million a year.

But in its effort to make herbal tea appeal to the masses, Kraft lost sight of Celestial's wholesome image. It pushed for product extensions such as seasonings for beef. "We would never have sold that," says Feinblum.

Relations between Kraft's pin-striped executives and the Levi-clad Feinblum, Siegel's handpicked successor, deteriorated further when Kraft,

responding to anonymous letters charging drug use at Celestial, put an undercover agent into the factory in 1987. Feinblum was furious. Shortly afterward, he says, he approached Kraft with a buyout plan, but Kraft refused. Kraft executives won't comment. Two months later, Kraft agreed to sell Celestial to Thomas J. Lipton Inc.

That was a bitter draught for Celestial, whose founder Siegel liked to say there were three things he hated—cancer, communism, and Lipton. But the sale was threatened by possible antitrust objections, so Kraft eventually consented to the management buyout.

HEFTY BAGS. Independence came at a steep price, however. Feinblum purchased the company with Vestar Capital Partners Inc. for an estimated \$60 million, including about \$45 million in debt. Celestial's \$6 million debt service this year is equal to its 1988 operating profit, and payments go up each year. Celestial must double revenues in five years, to \$80 million, and increase operating margins from 15% to 20% of sales just to service its debt, says Feinblum. It may have to take on more debt or sell equity to keep going.

Feinblum disagrees. Sales are up 16% this year, he says. He intends to launch new products to broaden the company's loyal customer base. Celestial recently introduced family-size herbal tea bags to appeal to iced-tea drinkers. And Feinblum may diversify further into salad seasonings or pot pourris, possibly through acquisitions.

Acquisitions and splashy new-product introductions may prove impossible without Kraft's resources. But Feinblum believes he signed the LBO just in time. Shortly before the deal closed Philip Morris Cos. bought Kraft. "I was bad enough being part of Velveeta's company," says Feinblum. "Can you imagine Celestial Seasonings being owned by a tobacco company?"

By Sandra D. Atchison in Denver



FEINBLUM: CHAFING UNDER KRAFT

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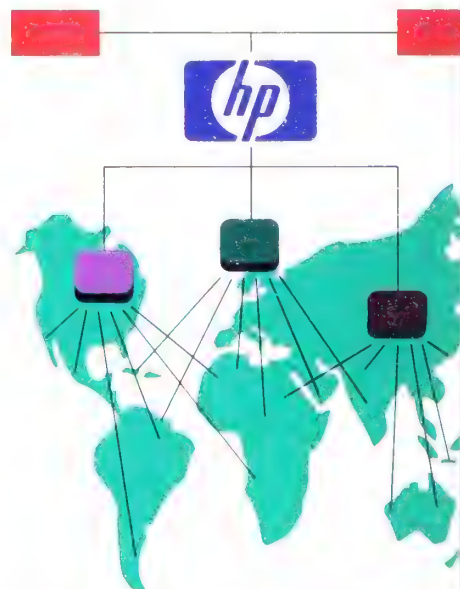
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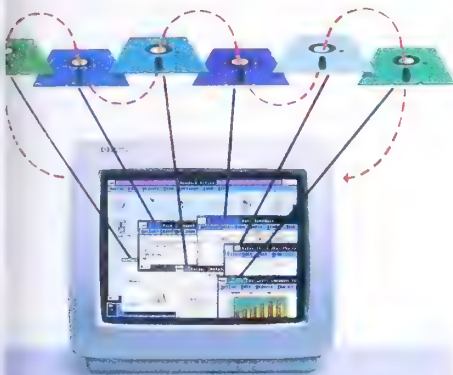
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THE SEARCH FOR WAYS TO BREAK OUT OF THE PRISON CRISIS

Jails are jammed, spending is soaring—so states are being forced to experiment

Donald V. Stanley walked out of prison 18 months ago better equipped for straight life than most ex-cons. During his four years in a California facility for serious juvenile crimes, Stanley earned a junior college degree. He also gained two years' experience as a reservations agent at a Trans World Airlines Inc. booking center set up inside the prison. Stanley, now 23, joined TWA full-time as a reservations agent after his parole. Newly promoted, he crows: "I'm living proof that it's worth giving people a second chance."

America is rethinking its prison system. The impetus is cold, hard economics: The growing expense of corrections has ballooned out of control. But in the search for ways to cut costs, corrections authorities also are exploring new means of punishing lawbreakers that may achieve a long-elusive social goal as well: a greater degree of rehabilitation. "We're on a train that has to be turned around," warns Morris L. Thigpen, Alabama's corrections commissioner. "It just doesn't make sense to pump millions and millions into corrections and have no effect on the crime rate."

The U.S. spends \$20 billion annually on corrections. Nearly 2% of all adults—3.4 million people—are in prison or jail,

on parole, or on probation. The number behind bars has doubled in a decade, nearing 1 million (chart). Among industrialized nations, only the Soviet Union has more prisoners per capita. The reason: A get-tough public mood has resulted in longer sentences and more jailings, especially for nonviolent crimes such as using and selling drugs. Drug arrests have soared while the general crime rate has been flat for a decade.

GRUNT WORK. Swelling numbers have strained prison capacity. To relieve overcrowding, officials are converting homeless shelters, troop ships, military bases, and at least one university dormitory to detention centers. A gargantuan prison construction boom now devours about \$65 million a week. Correctional spending is becoming the fastest-growing budget item for many states.

The advent of for-profit prison management companies holds some promise of trimming costs. Corrections Corp. of America, U.S. Corrections, Wackenhut, and other firms now supervise 3,000 inmates in 24 state and county institutions, slicing costs by 5% to 10%. But prison authorities are more hopeful about experiments with alternative sentencing and new forms of incarceration.

Florida, New York, Oklahoma, and

several other states, for example, now send some first-time offenders to short-term "boot camps" rather than to prison for years. In Georgia, "recruits" are roused at 5:15 a.m. for a day of pushups, grunt work, such as punishments scrubbing baseboards with a toothbrush or clearing the camp of rocks, and constant verbal abuse from corrections officers. "The harder you'd try, the more they tore you down," recalls Michael V. Rogers, who spent six months in Georgia's so-called shock incarceration unit after a 1986 burglary conviction. He now runs a plate glass business.

Boot camp is cheaper than a longer prison term. It relieves overcrowding. But how effective is it? In Georgia, 34% of boot camp veterans have been picked up for subsequent crimes, just a tad less than the 38% return rates for ex-cons from traditional state prisons.

Since half of U.S. inmates return to prison, reducing recidivism is a huge challenge—and the key to taming corrections budgets. The idea of turning prisons into rehabilitation centers was abandoned a decade ago. Treatment of substance abuse, a problem for more and more inmates, remains underfunded. But one goal of boot camp is to keep first-timers out of a hard-core environment.

ANSWERS TO A \$20 BILLION QUESTION



Recent alternatives to traditional prisons include:



Employing California inmates as TWA reservations agents, and.

ment where they might become hardened crooks. And there is an increasing emphasis on juvenile offenders, where rehabilitation has worked best.

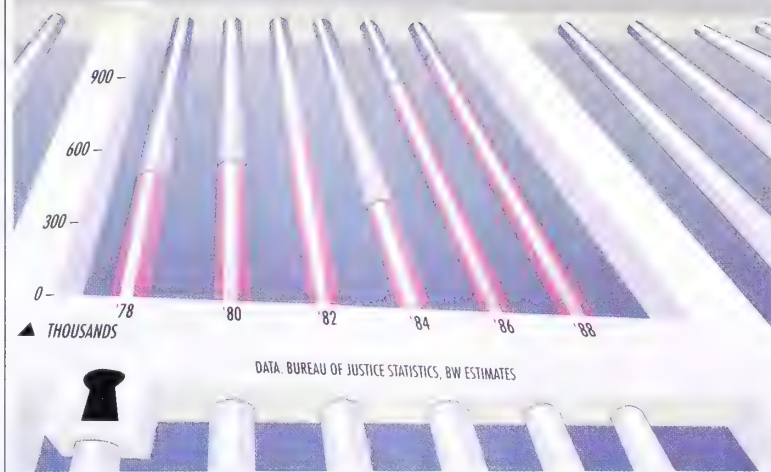
Some joint ventures between private industry and prisons seem to improve the odds of staying on the straight and narrow. The California program let TWA clerk Stanley learn job skills, pay \$3,000 in room, board, and restitution to crime victims and build a \$4,500 nest egg. Of the 28 inmates who graduated, only two have returned,

compared with a 60% recidivism rate for youthful offenders in general. Only the most promising are enrolled, however. And at \$27,000 a year per inmate, the program offers no instant cost advantage. Still, "if we can keep an individual on the streets and gainfully employed," says Fred F. Mills, director of the California program, "that's where the real savings come in."

HAMSTRUNG. Last year, joint ventures between 32 prisons and 45 private companies employed 1,500 inmates nationwide. Employers pay market wages—to the state and the inmates—but save on benefits, which can add up to 35% of compensation costs. They also get a flexible work force that can be hired, fired, or kept inactive as needed. But inmates acquire more training and are often less productive than other hires. Such programs are often criticized for taking jobs away from other workers or for giving employers a cost advantage.

Economic pressures also are forcing prisons to move to new industries—beyond farming, road work, and making

AMERICA'S SWELLING PRISON POPULATION



clothes and license plates. South Carolina uses inmates to build prisons and restore old buses. The federal prison industry, Unicor, makes sophisticated electronic cabling, among other products, for the Defense Dept. "It's as close to a business as it can get," asserts Jake Butcher, a former Tennessee banker serving a 20-year term for fraud, conspiracy, and income-tax evasion, who earns 88¢ an hour as a Unicor clerk.

Laws restrict prison industries from competing with outside businesses, limiting their growth. Most administrators still put more importance on filling idle inmate time than on profits. Although Unicor rings up annual sales of \$300 million, it lost money last year, while the federal prison budget grew 23%, to \$933.7 million. And during a 12-day prison riot by Cuban detainees in Atlanta last year, former Oxford Industries Inc. plant superintendent Charles W. Young, who now heads R&D for Unicor's textile division, found himself with an automatic rifle in his hands, wondering if he might have to shoot some of his workers.

Young watched helplessly as his factory burned to the ground. "Unicor tries to be a business," sighs Young, "but we are hamstrung."

Still, a new breed of prison administrator is taking a business approach to corrections. Georgia Corrections Commissioner David C. Evans, an MBA and accountant, reorganized prison food production into a self-supporting business, saving \$2 million annually.

Like Evans, many prison administrators, faced with the prospect of yet another doubling

of the prison population by 1998, believe they can't build their way out of the overcrowding problem. Some now support alternatives to standard prison sentences, particularly for the 45% of prisoners convicted of nonviolent crimes such as drug abuse, burglary, or drunk driving.

About 35 states assign nonviolent offenders to so-called intensive supervision. In Georgia, probationers meet with an officer five times a week. They are expected to find and hold jobs, perform

community service work, and submit to random drug tests and home curfew checks. At \$6 per day, the cost is far below Georgia's \$32 state prison tab.

HOME HANDCUFFS. A more severe version called "house arrest" lets detainees leave home only for work, job hunting, addiction treatment, or other care. Their comings and goings are monitored electronically. If they walk out the door, an electronic bracelet triggers an alarm. Or their wrist band may have to be touched to the phone during random check-in calls from authorities. One device tests offenders' breath for alcohol, then sends in results by phone. Some 14,000 men and women nationally are under electronic house arrest.

As a model of prudent resource allocation, some prison reformers point to Minnesota, which simply makes state prison its destination of last resort. "There is no vaccine for crime," says Minnesota Correctional System Commissioner Orville B. Pung. "But sometimes we send people to the Mayo Clinic when outpatient treatment will do." Using guidelines based on an offender's crime and record, judges may sentence a person to a community-based detention center, halfway house, or various forms of probation, as well as prison.

With lesser offenders sent elsewhere, Minnesota state prisons have room to hold inmates longer. Other jurisdictions often find overcrowding requires early parole. Indeed, institutions in dozens of states are under court order to reduce overcrowding and free up beds—meaning that get-tough sentencing is actually forcing more inmates to be released early. So, while judges quadrupled the length of prison sentences between 1965 and 1985, the actual time served has remained constant, notes Todd R. Clear, a criminal justice professor at Rutgers University. And many of those released early will commit new crimes—the most expensive outcome of all.

By Scott Ticer in Atlanta



Giving Georgia first-timers the 'boot camp' treatment

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Sports Business

HORSE RACING

HAS RACING STAKED ITS FUTURE ON A BAD PONY?

Simulcasting hasn't helped stop the slide in attendance



You would be hard-pressed these days to find a happier guy than Gerald Lawrence, general manager of Churchill Downs, home of the Kentucky Derby. Not only does he expect 135,000 racegoers to bask in the pageantry of the Derby on May 6, but he also plans to telecast the race nationwide to about 119 racetracks and off-track betting facilities chock full of horseplayers. "Christmas in May" is how Lawrence and others associated with the track describe the annual race.

Indeed, just the \$2 million Lawrence expects to net on Derby Day from bettors outside Kentucky makes it seem as if Santa Claus decided to take up residence in Louisville. The boost from off-track telecasting and betting has been an important element in rejuvenating the once-stagnant track, although spruced-up facilities and sharper marketing have helped, too. Of the \$1.86 million Churchill Downs Inc. netted from off-track betting on the 1988 Derby—considerably more than the \$1.1 million cleared at its own windows—half went into richer purses, which attract better horses and bigger crowds during the season.

There's a hitch, though. After Derby Day, Lawrence is not so euphoric. He shares with other racing officials a gnawing concern about the long-term effects of sending and receiving televised

races for betting purposes, otherwise known as simulcasting. Although total wagering on thoroughbred racing nationwide has increased 62%, to \$9.5 billion, since 1968, the rise in betting has not meant a boost in attendance at the tracks. Paid admissions have fallen 19% over the same period. In fact, Lawrence contends that simulcasting is exacerbating the decline: "This is a disaster waiting to happen, if we are not careful."

AGING RAILBIRDS. Why? Simulcasting has not fulfilled hopes of broadening racing's appeal. It has only made it easier for experienced railbirds to bet more often. This is a problem because the crowd is growing older and dwindling in number. That has placed Churchill Downs and other tracks like it in a hors race to fill their grandstands with new fans. Says Ogden M. Phipps, president of the Jockey Club in New York: "The industry must do two things—lure people to the track and educate them."

That's no easy task. "Pitiful is how you can describe the racing industry's attempt to bring in new fans," says Ker Alhadeff, executive vice-president of Longacres Race Course in the Seattle suburb of Renton. "Kids grow up with football," he says, "but horse racing remains a mystery to most of us. Simulcasting won't be the savior of racing. The savior of racing will be our ability to

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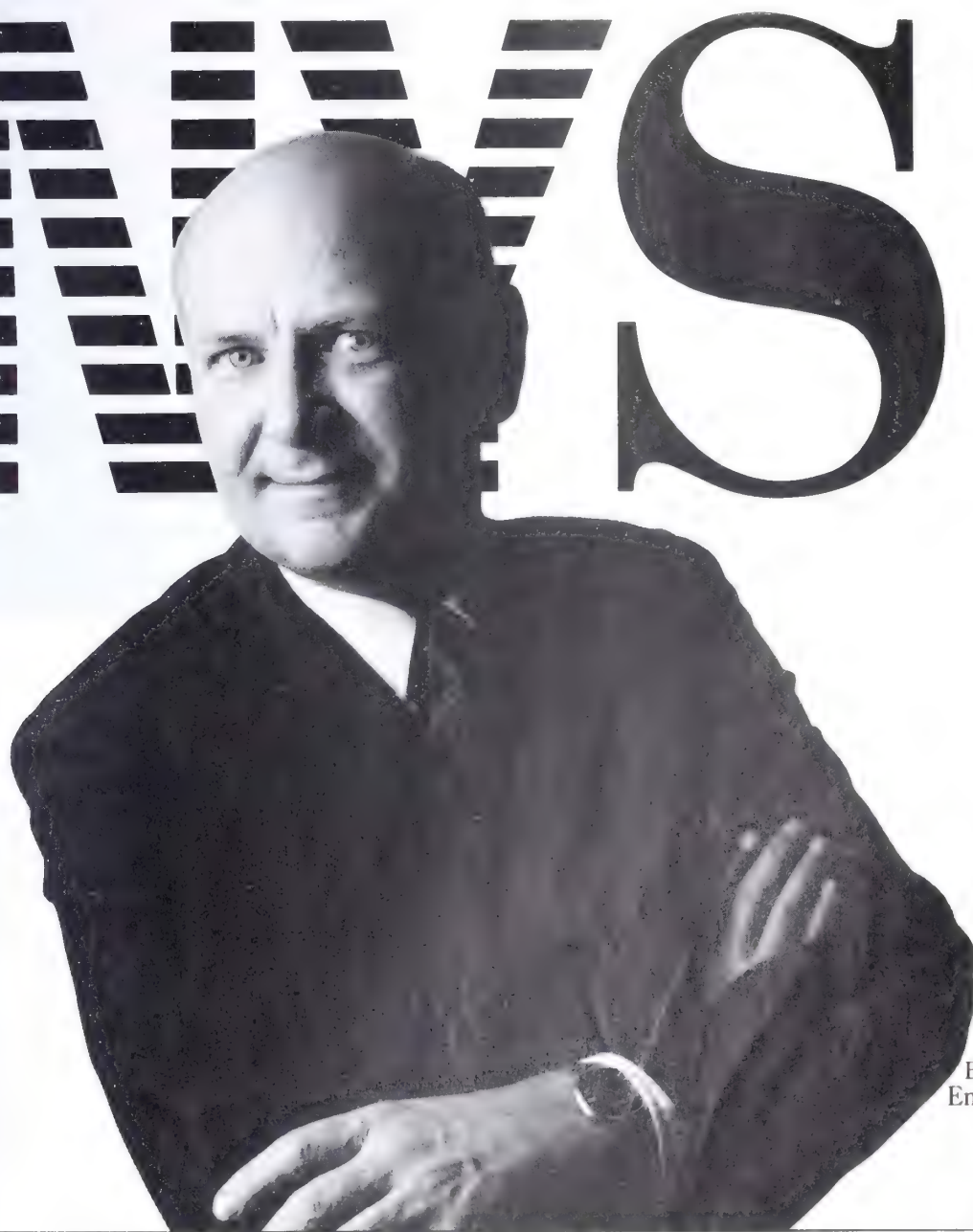
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attract new fans by ripping down the intimidation factor."

Longacres is trying to develop a strategy to bring in the uninitiated. It passed out a "First Timer's Kit" explaining how to read the *Daily Racing Form*. And there's also a "New Comer's Corner," where an ex-jockey explains the arcane science of handicapping and betting.

VENERABLE OVAL. Churchill Downs has some things going for it that other major tracks lack, however—foremost being that horse racing is an integral part of Kentucky social life. As a result, the 115-year-old track doesn't have as hard a problem attracting new racing fans, and it doesn't need to run handicapping seminars. But its facilities were showing their age. In the past four years, clubhouse in the white clapboard, twin-spired grandstand have been redone, replete with plush carpets and white linens, tablecloths. And now fans can get a bet

THE SIMULCASTING PAYOFF

Results of closed-circuit broadcast of
1988 Kentucky Derby to betting outlets

Total wagers at simulcast outlets	\$25,500,000
Less: State taxes	880,000
Bettors' winnings	20,900,000
Simulcast outlets' share	1,860,000

Churchill Downs' simulcast share **\$1,860,000**

DATA: CHURCHILL DOWNS INC.

ter view of the horses before a race.

In addition to the \$25 million refurbishing program, Churchill Downs' management has had to learn to market the venerable oval. It now offers fans the opportunity to attend receptions for jockeys and is pushing hard to increase group sales, which currently represent about 15% of the track's total annual attendance of 1.2 million. One prime target is Kentucky-based companies. They're being urged to reward employees with a day at the races.

Here again there's a problem, however. Although Churchill Downs doesn't simulcast the Derby locally, for fear of cannibalizing attendance, the track does simulcast regular-season races. So it has stopped advertising to northern and western Kentucky and Cincinnati because those areas receive the broadcasts. Instead, management has had to concentrate much of the track's annual \$1 million promotion budget in such faraway places as Indianapolis and Nashville. And if Churchill Downs can't attract the folks in those areas to the twin spires after Derby Day, there may not be much hope for growth at the nation's less storied racetracks.

By Stephen Phillips in Louisville



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BOONE PICKENS, SAMURAI WARRIOR

He stirs up Tokyo and grandstands for the folks at home

The corporate raider was in his element. T. Boone Pickens had paid roughly \$770 million for 20% of Koito Manufacturing Co., a major Japanese auto parts maker, and in mid-April he traveled to Japan to press for greater shareholders' rights. Everywhere he went, television cameras and reporters swarmed around him. At a luncheon in Tokyo's New Otani Hotel, 350 people crowded in, forcing the organizers to move the session to a larger auditorium. Next came a lively press conference attended by more than 100 reporters. The question on everyone's lips: What does Pickens want? Says a colleague at Boone Co., one of his investment firms: "It felt a lot like the Gulf Oil days."

SUFFERING. That speaks volumes about Pickens' motives. Once America's most feared raider, he racked up nearly \$400 million from a run at Gulf Oil Co. in 1984. But in recent years, he has seemed more like a minnow than a shark. Since 1986, he has made three hostile raids, all of them unsuccessful. Thanks to plunging gas prices, his huge investment in natural gas properties has suffered. Now, Pickens plans to run for governor of Texas in the 1990 election, but among Republicans he's a distant third in the polls. What better way to raise his profile—and wave the American flag—than to take on Japan?

Pickens, 60, naturally offers a different explanation. He insists his goal is not to toot his own horn or even to frighten Koito into buying back his stock at a premium. He says he wants to squeeze more profits from Koito, which earned \$26 million last year on sales of \$815 mil-

lion. That, he argues, could stir up a shareholder rebellion, cracking open the cozy \$3.4 trillion Japanese stock market to other foreign investors.

Whatever his motives, Pickens faces enormous hurdles. There are deep cultural and economic reasons behind Ja-



PICKENS: DEMANDING HIGHER PAYOUTS BY KOITO

pan's interlocking shareholding system, where friendly investors—often affiliated companies or banks—control large blocks of a given company's stock. Along with other allies, Toyota Motor Corp.—Koito's biggest customer—holds 62% of Koito's stock. None is eager to

let Pickens whip up a shareholder frenzy and shatter those close relationships.

Yet Pickens' surprise attack may have given him an edge. When Japan's Finance Ministry denied Koito's request to block Pickens' investment, Koito grudgingly agreed to a meeting. In a one-hour session on Apr. 20, Pickens asked Koito officials for board seats and bigger dividends. He is expected to make formal proposals before Koito's annual meeting in June. "The Japanese market will open up," he vows. "We're just seeing the beginning."

Pickens got interested in Koito last November when he was introduced to Japanese investor Kitaro Watanabe, 55, who made a fortune as a used-car dealer. In recent years, Watanabe has ex-

panded heavily into real estate and stock investments, emerging as a leading raider in Japan. But after buying up to 25% of Koito last year, Watanabe had been trying to sell his stake at a big profit to Toyota, which had paid off a greenmailer a year earlier. This time, Toyota refused. With few prospects at home, Watanabe flew to Amarillo, Tex., to meet with Pickens.

BAD LUCK. Pickens was leery about jumping into an unfamiliar market. But after 10 discussions with Watanabe, they hammered out a deal in March. Pickens won't describe the pact, but sources believe it includes an agreement by Watanabe to buy back Pickens' 20% at a set price, minimizing his exposure should the stock fall. Says one merger specialist who has dealt with him: "Pickens isn't the kind of guy

who forgets to leave himself an out."

At least not usually. Through Mesa Petroleum Co., which he founded in 1964, Pickens burst onto the scene in the early 1980s with flamboyant raids on Big Oil. Assaults on Cities Service, Gulf and Phillips Petroleum brought him

more than \$500 million. But in 1985, when he bought a 13.6% stake in Unocal, it fought him off with a stock buyback program that excluded Pickens. Later bids for Newmont Mining, Homestake Mining, and KN Energy fizzled.

The bad luck has continued. Since cor-

FROM AMARILLO TO TOKYO: BOONE'S ROAD TO JAPAN

SUMMER, 1988 Japanese investor Kitaro Watanabe, who holds a large block of Koito's stock, approaches Toyota to buy him out. Toyota refuses.

NOVEMBER, 1988 Raider T. Boone Pickens meets Watanabe in Amarillo, Tex., to discuss buying his Koito stake.

MARCH, 1989 After 10 meetings, Pickens acquires 20% of Koito for an estimated \$770 million. Shocked, Koito asks Japanese Finance Ministry to re-

view Pickens' investment and refuses to register his stock.

APRIL, 1989 Pickens travels to Japan, where he raises a fuss about shareholders' rights. Koito grudgingly drops opposition to Pickens' registration and meets with him.

JUNE, 1989 Koito will have its annual meeting, where company officials expect Pickens to apply for representation on its board.

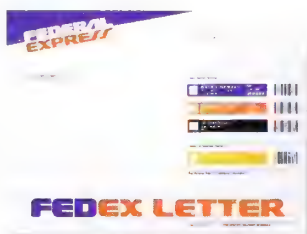
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THE POWER IS ON

verting Mesa into a limited partnership in 1985, Pickens has snapped up \$1.7 billion worth of producing gas reserves. But lately, Mesa has been hurt by slumping gas prices, and in March, Pickens had to cut the partnership's distributions by 25%, to \$1.50 a unit. He has continued to show a profit by dabbling in arbitrage investments, taking stakes in companies such as Polaroid, Hospital Corp. of America, RJR Nabisco, and Pillsbury. In the first quarter of 1989 he had trading gains of \$42 million, allowing Mesa to report earnings of \$14.6 million.

STOCK SHOCK. Through it all, Pickens has remained as feisty as ever. Lately he has spent a good portion of his time battling Amarillo. Last year, the city sued Mesa to get Pickens to reduce the cost of the gas it sells to Amarillo's utility company. Pickens responded with a barrage of full-page "Mesa Messages" in the local paper, arguing that his price was fair. He also threatened to quit hiring in Amarillo. The dispute was settled in March, with the city agreeing to a higher price than it wanted.

On his recent trip to Japan, Pickens wisely left such tough tactics at home. He appeared jovial and at ease, regaling Japanese reporters with jokes about

rough times in the oil patch. At one meeting, when an analyst mentioned that she had profited from an investment in Mesa Petroleum stock, Pickens drew a big laugh by quipping: "Uh, everyone, this is my daughter." Most of the time, though, his topic was a familiar one: shareholders' rights.

The message was met with interest,

The Tokyo market doesn't seem to take Pickens seriously. Koito stock has fallen 25% since he jumped in

but it's not as if Koito's shareholders were crying for Pickens' help. The company is an industry leader in automotive lighting, which accounts for 92% of sales, with a debt-free balance sheet and an established track record of successful products. Its stock sells at 210 times earnings, lofty even by Tokyo standards. Most of its sales are in Japan, with Toyota accounting for 45% of its revenues. Conceivably, Pickens could steer

Koito into new markets. He could also try to eliminate Toyota's hefty discount on products. But Koito already enjoys operating margins of more than 4%—compared with 2% for many Nissan suppliers. Few experts believe Pickens can improve that kind of performance.

The Tokyo market, for one, doesn't seem to take Pickens very seriously. After rising eightfold since 1987, Koito's stock has tumbled about 25% since Pickens jumped in. It's now trading at 4,050 yen, or around \$31. Further declines could send him scrambling for cover. Japanese law prohibits Koito from buying its own stock, but analysts believed that Toyota could easily shed Pickens by buying him out at a small premium.

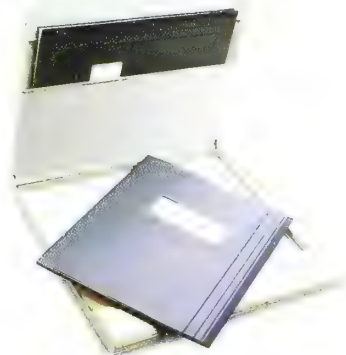
Yet in at least one respect, Pickens is in a position of strength: His railing against Japan's closed markets may already have the government over a barrel. Should Tokyo try to block him from exerting more control, he will have "enough ammunition to work them over in the U.S. for months," says a source close to Pickens. If he's serious about running for governor, that may be all he wanted in the first place.

By Mark Ivey in Amarillo, with Ted Holden in Tokyo

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A dark, high-contrast photograph of an industrial setting, possibly a factory or refinery. A bright red glow emanates from a large piece of machinery in the lower-left foreground, illuminating the surrounding dark structures. The background is mostly black with some faint industrial details.

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EDITED BY ANDREA ROTHMAN

TODD VANDER PLUYM: MAKING A PILE IN SAND SCULPTURE



The Madonna and Child have been favorite subjects for sculptors. They have been portrayed in wood, silver, ivory, and countless other materials. But Todd Vander Pluym undoubtedly broke new ground when he rendered the famous pair on the beach at Santa Monica, Calif. His medium of choice: sand.

As owner of Sand Sculptors International, Vander Pluym, 48, has built a thriving business out of an art usually reserved for schoolchildren on seaside outings. Using nothing but tightly packed sand and water, he and his six assistants create castles, dragons,

and other fairy-tale creatures of remarkable size and detail. Last year, he brought in nearly \$300,000 by sculpting at shopping malls, hotels, and beaches in 12 states and overseas.

Vander Pluym got his start, naturally, on the beaches near his home in Manhattan Beach, Calif. Before long he was winning competitions sponsored by beer companies and civic groups. Although he was trained as an architectural draftsman, he traded his pens for a sand pail in 1981.

He charges anywhere from \$800 to \$500,000 for a single work. In one of his most ambitious projects, Anheuser Busch Co. paid him \$120,000 to build a 120-foot-long row of buildings in Albuquerque, N. M., showing the evolution of architecture in the state. And after the Washington Redskins beat the Denver Broncos in Super Bowl XXII in San Diego, Vander Pluym recreated a scene from the game at a nearby hotel. No, the Broncos didn't get to come and kick it down.

By David Castellon in Los Angeles

COPIE LILIEN: HEFTY SALES IN HEFTY KIDS' TOGS



As a teenage girl, Copie Lilien found it humiliating to go shopping for clothes. Finding items that fit was nearly impossible, and salespeople were openly rude to her. She weighed 200 pounds.

At 33, a slimmed-down Lilien is hoping to relieve such trauma

with At Last Inc., a company that specializes in clothes for obese children. Lilien runs the three-year-old business from a warehouse in Norwood, Mass., making patterns herself and sending them to local factories for manufacturing. The company has one retail store in Norwood but gets most of its business from catalog sales.

The secret to dressing overweight children is not to squeeze

them into smaller clothes. "We don't design our clothes to camouflage size," Lilien says. "Our philosophy is, if the clothes fit properly, the kids don't look as big." At Last's first line three years ago included only pants. This year's catalog—which offers clothing for kids weighing up to 230 pounds—has 79 different styles.

After a slow start, orders are picking up fast. Lilien says she will bring in about \$800,000 this year, up from \$270,000 last year, and she also expects to break even this year for the first time. Until now, At Last has survived on financing from family and friends, but Lilien hopes to attract money from venture capitalists so she can expand the business.

The potential is large. A recent Harvard University study showed that 27% of American children are obese—that is, at least 20% above ideal body weight. And since children's apparel is already one of the fastest-growing segments of the retail industry, oversized children's clothes are an attractive niche. "It's about time someone figured it out," says Harry Bernard of Colton Bernard Inc., an apparel marketing firm. Lilien didn't have to figure it out, though—she lived it.

By Robert B. Duffy in Norwood, Mass.

FLAX AND ROSENFELD: TAKING PIZZA WAY PAST PEPPERONI

Everyone knows that Californians will eat just about anything. But when the owners of California Pizza Kitchen brought out a new delicacy last year, they found something that broke the rule: egg-salad pizza. "It sold zip," recalls co-owner Larry S. Flax. Fortunately, other concoctions have fared better. Since 1985, when Flax (left) and Richard I. Rosenfield quit their law practice to start cooking, they have found plenty of customers who like pizzas with such trendy toppings as Thai chicken, duck sausage, and shrimp pesto.



Their offerings have been such a hit that Flax, 46, and Rosenfield, 43, have opened five restaurants in California and one each in Chicago, Atlanta, and Honolulu. Now the sweet smell of success has attracted others. Vie de France, a French-owned restaurant chain, has signed on for a joint venture. The two companies will open 20 East Coast outlets, starting this spring in McLean, Va.—and they're planning more in European cities, as well as in Australia, Singapore, and Japan.

Exotic pizza has paid off handsomely for Flax and Rosenfield. Their 62% stake in the company is now worth \$27 million—not bad for an initial investment of \$200,000. The company's revenues hit \$10 million for the year ended last June 30, they say, and should reach \$16 million this year.

Now all they have to do is persuade the rest of the world to be as adventurous as Californians. Flax concedes that every one may not love barbecued-chicken pizza, the No. 1 seller in California. But he says the restaurant's chefs are flexible. For a proposed Tokyo restaurant, for instance, they're working on a number of scallop and fish offerings. "Our philosophy is to bring taste to pizza that people like," says Flax. Yet the egg salad debacle has clearly made him nervous about going out on a limb. "There won't be a sashimi pizza for the Tokyo restaurant," he says. That is, unless they start asking for it.

By Patrick E. Cole in Los Angeles

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FUSION IN A BOTTLE: MIRACLE OR MISTAKE?

FRUSTRATION IS BUILDING AS PROOF REMAINS OUT OF REACH

On Apr. 24, B. Stanley Pons arrived for his weekly meeting with the press wearing a striped yellow polo shirt and black Reeboks, looking relaxed and confident. A month earlier, the 46-year-old University of Utah chemist had stunned the scientific world with an astonishing claim: that the nearly limitless energy of nuclear fusion could be unlocked with little more than a car battery, a palladium electrode, and a bottle of water in a Rubbermaid dish pan.

As television lights glared and cameras flashed, an unruffled Pons fielded a rush of questions from a throng of reporters. Why have so many labs around the world been unable to duplicate the experiment? When will the scientific community be convinced? The guru of "cold fusion" laughed. "The next round of experiments," he said, "will produce a whole host of data that will be more convincing."

INCOGNITO. Ever since Mar. 23, when Pons and his British colleague, Martin Fleischmann, announced their claim of fusion in a jar, they have been at the center of a storm—facing TV cameras, shuttling to other laboratories to consult with fellow researchers, flying to professional meetings. To avoid the crush of scientists and reporters before speaking to a crowd of 7,000 at the American Chemical Society in Dallas on Apr. 12, Pons checked into his hotel under an assumed name. The slight, bespectacled scientist was escorted to and from the packed convention hall by a phalanx of security guards.

The attention riveted on Pons and Fleischmann was hardly surprising. Ever since the dawn of the atomic age, scientists have been trying to harness fusion as a source of energy. But after 40 years and an estimated \$20 billion in research, progress has come only in inches. In an attempt to cause hydrogen

molecules to combine into helium—the reaction that powers the sun—the researchers are blasting tiny spheres of hydrogen with powerful lasers. They are also building "tokomaks"—doughnut-shaped devices that heat hydrogen to searing temperatures in immensely powerful magnetic fields. Neither approach has yet produced as much energy as it consumes.

So the team's announcement that it

is, water in which normal hydrogen is replaced with an isotope called deuterium—disappeared from laboratory supply rooms. Dropping all else, many researchers flew thousands of miles to the Dallas convention, hoping to learn new details. "It's such a momentous claim that you have to pay attention," says chemist Mark S. Wrighton of Massachusetts Institute of Technology (MIT).

FRENZIED RACE. Yet the advanced communications of the 20th century quickly turned that excitement into a media circus that swept up scientists and the public alike. The possible discovery of cold fusion has all the makings of a whodunit, complete with a feud between leading researchers. Is it real? Are Pons and Fleischmann heroes, bunglers, or charlatans? Prominent scientists and major universities became willing actors in a drama played out not in the staid arena of scientific journals but in the press.

With the heady smell of Nobel prizes wafting from the lab, many scientists—even those in unrelated fields—slapped together hastily constructed experiments. The usually slow and painstaking process by which researchers verify new findings—repeating the experiment under different conditions—was thrown to the wind. The twitch of a needle on a laboratory instrument was not cause for further study but reason to call a press conference.

University and laboratory officials were eager accomplices. To them, fusion meant billion-dollar patents, institutional prestige, and new research centers. Even MIT called a press conference to announce that it had applied for patents relating to a theory on fusion by one of its prominent faculty members—only a day after he had completed his complex calculations.

All of it is being fed to an eager public



**PONS AND FLEISCHMANN INSIST
THEY'VE GIVEN COMPLETE
DETAILS OF THE EXPERIMENT—
BUT THEY DON'T KNOW THE
FULL PARAMETERS THEMSELVES**

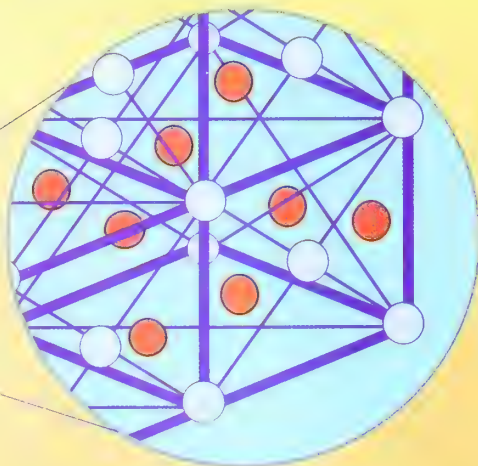
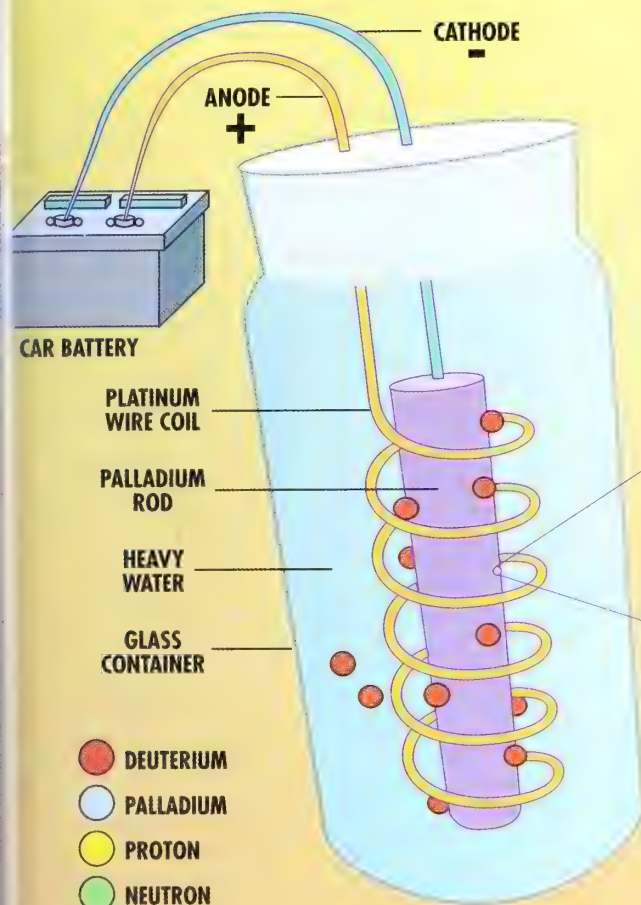
had produced up to four times the energy put in—using equipment found in most high-school chemistry labs—was enough to make the pair instant celebrities. It was also enough to arouse widespread skepticism among scientists.

What followed was fusion fever. The chance to prove or disprove a potential breakthrough of enormous proportions sent scientists racing to their labs to try the experiment themselves. Within hours, palladium and heavy water—that

WHAT'S GOING ON IN THAT BOTTLE?

CAN IT BE FUSION? IF NOT, WHAT IS IT?

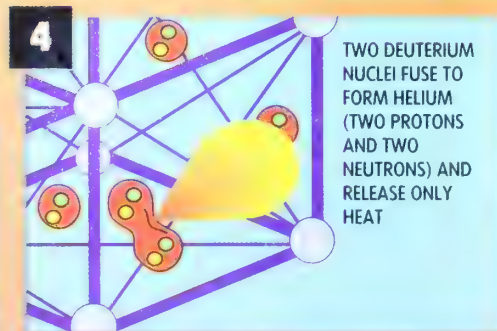
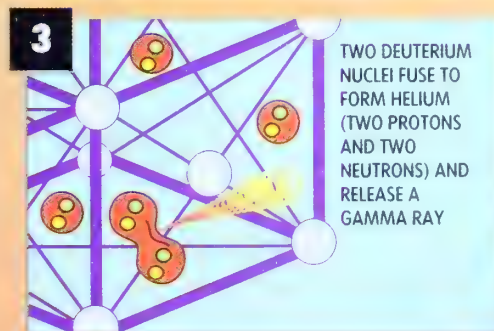
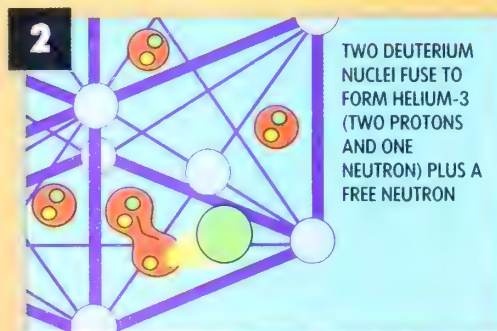
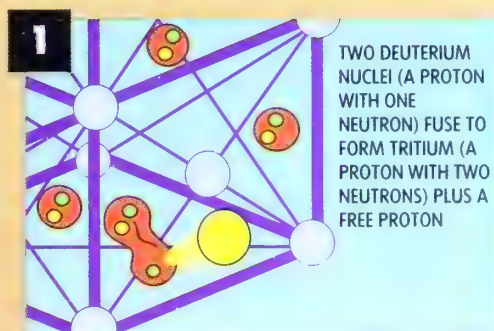
B. Stanley Pons and Martin Fleischmann filled a bottle with heavy water (which consists of oxygen and an isotope of hydrogen called deuterium) mixed in lithium salts. In it they immersed a palladium electrode wrapped with a coil of platinum. After running current through it for about two weeks, they said, the palladium began to heat up—releasing four times the amount of heat as the energy they put in.



This, they claimed, could only be fusion. Their reasoning: Ions of deuterium were migrating into the crystal lattice of the palladium, where they became so tightly packed that they fused to form atoms of helium.

SEEKING THE TELLTALE SIGNS

Others weren't so sure. Scientists know that there are four possible fusion reactions, all of which produce heat. But those thought to be the most likely also produce radiation or a hydrogen isotope called tritium. So researchers have set up sensitive detectors to look for indications of each reaction.



Cover Story

in a dizzying rush of on-again, off-again news reports. Among those trying to get the real story on fusion were Congress and President George Bush. The day after Pons's address in Dallas, Energy Dept. officials summoned University of California at Berkeley physicist and Nobel laureate Glenn T. Seaborg to a White House briefing. "I told the President that there was some skepticism—that it was still up in the air," says Seaborg.

On Apr. 26, Pons and Fleischmann, along with scientists and administrators from Brigham Young, Stanford, MIT, Princeton, and Oak Ridge National Laboratory, went to Washington to appear before the full House Committee on Science, Space & Technology.

With visions of fusion gold flowing into the state's coffers, Utah and its state university are angling to become a major center of fusion research, even though the experiments have not been verified. Governor Norman H. Bangerter called a special session of the legislature on Apr. 7 to appropriate \$5 million for a fusion center. At the recent Washington hearing, officials asked the government to ante up \$25 million in seed money to establish a \$100 million cold fusion research institute. Former University of Utah president James Fletcher, who recently resigned as chief of NASA, has agreed to head an advisory panel.

ODDITIES. In Utah, the Pons-Fleischmann announcement is already one of the biggest events since Brigham Young first laid eyes on the Great Salt Lake. "We were prepared for the media, but not for all the calls from companies, venture capitalists, and other people," says Pamela W. Fogle, the University of Utah's news director. A literary agent called with contracts already prepared for the scientists' exclusive story. A woman in Texas was worried that the oil industry would collapse and wanted to know if she should sell her house.

The little-known story of "fusion in a bottle" began long before the University of Utah held its press conference. Back in 1926, before fusion was known, German scientists Fritz Paneth and K. Peters filled a chamber with hydrogen gas and palladium. When they analyzed the gases later, they found helium—a sign that fusion might have occurred.

A paper describing the Germans' experiment was published in the British scientific journal *Nature* in 1927. But like Pons and Fleischmann, they were

met with critics, among them such prominent physicists as Britain's Lord Rutherford, the father of modern atomic theory. In the 1940s, Soviet physicist Andrei Sakharov put forward the idea that cold fusion could take place if hydrogen's electrons were replaced by fleeting atomic particles called muons.

The Utah team's fusion discoveries, however, came partly through serendipity. Pons had studied for his doctorate in chemistry under Fleischmann at Britain's University of Southampton in the 1970s. There, Pons learned that Fleischmann, who was conducting experiments on deuterium, had discovered unexpectedly low levels of the substance in the

Then, stick in two electrodes, one made of palladium—a metal with a well-known affinity for hydrogen—and the other chemically inert platinum. When a battery is attached to the electrodes, the electric current splits the water into deuterium and oxygen by a process known as electrolysis.

Since the molecular structure of the palladium electrode looks more like Swiss cheese than solid metal to the deuterium ions, the electric current draws them deep into the metal. There say the scientists, the deuterium ions could become so tightly packed together that they fuse—releasing energy. Pons and Fleischmann put the apparatus in a dishpan full of water to capture any heat, added a thermometer, and facetiously dubbed their device the Utah tokamak. "It had a billion-to-one chance of working. But the stakes were so high, we decided to try it," Pons recalls.

Over the next few years, the two scientists say they refined the apparatus, experimenting with different amounts of palladium and electric current. They funded the experiments with \$100,000, partly from profits from JAS Instrument Systems, a company founded by Pons. By last summer, they felt sure that something extraordinary was happen-

ing—that for the first time, their fusion experiment was putting out far more energy than it consumed. They sent a proposal for funding to the Energy Dept.'s advanced energy projects office.

That set the stage for what has become a seething dispute with another Utah professor, Brigham Young University physicist Steven E. Jones. As early as 1982, Jones had used muons to demonstrate that extremely low levels of fusion could be achieved without the enormous heat of the sun's interior. Believing that natural fusion might also be taking place deep within the earth, he began trying to pack hydrogen and deuterium into various metals. By the end of 1988, he was convinced that his experiments were producing small quantities of neutrons, a sure sign of fusion.

In September, 1988, the Energy Dept. asked Jones to review Pons and Fleischmann's proposal. Realizing that similar work was going on only 40 miles away, Jones agreed to a series of meetings with the Utah scientists. On Feb. 10, Jones says, Pons and Fleischmann toured his laboratory. Then on March 1, BYU officials say, University of Utah



**ENTHUSIASM IS FADING FAST.
'IT'S BECOMING SENSELESS,'
SAYS ONE DUTCH
RESEARCHER. 'NOTHING
IS HAPPENING'**

electrodes he was using. Years later, after moving to the University of Utah's chemistry department, Pons found similar anomalies while using electrodes to separate hydrogen from deuterium. But it wasn't until longtime collaborator Fleischmann arrived in Utah for an annual visit in the mid-1980s, that the two chemists compared notes on the oddities in their electrodes.

During a hike up Millcreek Canyon in Utah's Wasatch Mountains, the pair became convinced that they were on to something big. A month later, they met in Pons's kitchen to plan a test. The experiment they concocted was disarmingly simple. Take a jar of heavy water and add a salt, such as lithium hydroxide, so the water conducts electricity.

resident Chase Peterson called BYU and asked Provost Jae R. Ballif for an immediate meeting between the two schools to discuss the work both were doing. He said there were billions of dollars at stake and Nobel prizes in the offing," recalls F. LaMond Tullis, the BYU vice president who oversees the school's scientific research. The meeting took place on March 6.

According to Tullis, Pons and Fleischmann indicated that they would prefer to devote up to 18 more months to research before announcing their results,

but Jones said he could not possibly delay publication of his results past the May 1 meeting of the American Physical Society—where he had already agreed to speak. The upshot, Jones thought, was an agreement to simultaneously publish their findings by May 1—keeping quiet until then.

Things didn't quite work out that way. On Mar. 22, Jones learned that the University of Utah was holding a press conference the next day to announce its discovery. "We were shocked and disappointed," says Jones. They were more

offended by the press conference. The University of Utah's vice-president for scientific research, James Brophy, was asked by a reporter whether he knew of similar work being done at other universities. "We're not aware of any such experiments going on," he said. Jones now displays notarized lab books to document his independent research.

Jones believes at least one member of the Utah team is contrite. He says that when he later encountered Fleischmann at a scientific meeting in Sicily in mid-April, the British scientist took him

WILL THIS TORTOISE BEAT THE HARES?

In a sprawling basement lab at Brigham Young University in Provo, Utah, physicist Steven E. Jones carefully drops a peanut-sized lump of palladium into a small jar. He pours in a mixture of heavy water and metal salts, adds a sliver of gold foil, and clips wires to the two pieces of metal. Then he turns on the current and waits. Within an hour, sensitive instruments begin to detect neutrons—an indication that nuclear fusion is taking place.

The experiment is almost identical to the headline-grabbing work done by B. Stanley Pons of the University of Utah and Martin Fleischmann of England's University of Southampton. But there's one crucial difference: the energy levels produced in Jones's experiments are a million-fold lower. Pons and Fleischmann contend that their apparatus for achieving fusion generates more heat than it consumes—enough heat, in fact, to offer a cheap new source of commercial energy. "If the level of our heat was \$1," says Jones, "the level claimed by the University of Utah would pay off the national debt."

HEADFAST SILENCE. At this point, most physicists tend to side with Jones, who is now caught in a bitter dispute with Pons and Fleischmann. Jones's results are clearly a lot more believable," says Stephen O. Dean, president of Fusion Power Associates in Gaithersburg, Md. Unlike Pons and Fleischmann, Jones ran a number of ordinary-water control experiments and steadfastly refused to discuss his findings with the press before publishing them in a scientific journal. Although he has been doing pioneering work in "cold" fusion for more than a decade, he has refused to make extrav-

agant claims. In fact, Jones does not believe his experiments portend a new era of cheap, inexhaustible energy. "I think this is an exciting scientific discovery," he says. "But I feel like I'm providing a cold splash of reality."

BYU's table-top fusion experiment grew out of a serendipitous meeting of

naturally in the center of the earth. And if it was happening under some conditions, "we thought we might reproduce it in the lab," recalls Palmer.

Within a month, Jones had devised methods of packing deuterium from heavy water into palladium electrodes and had detected traces of neutrons coming from the experiments. "We were tantalized, but we didn't run off and say, 'This is it,'" says Jones. It wasn't until colleague J. Bart Czirr built one of the most sensitive neutron detectors in the world that the eight scientists on the team became fully convinced they were seeing fusion. By February, 1989, they were ready to publish their results.

STUNNED. That's what ignited the controversy with the University of Utah. BYU's scientists, who had been in contact with Pons, thought the two groups had agreed to publish at the same time—and keep quiet until then. So Jones was stunned when the Utah team called a press conference on Mar. 23 to disclose its findings—not in a scientific paper but to a crush of reporters and the harsh glare of TV lights.

What most saddens the soft-spoken Jones, a devout Mormon, are veiled accusations from the University of Utah that he stole ideas from Pons. "I think, frankly, that there is an effort to discredit us," says Jones. "It hurts sometimes."

Palmer is more philosophical. "We thought they should have waited to announce their results, but in the long run, it doesn't make a difference," he says. "Our paper is out there and will be read." Who is right? Science will soon decide.

By John Carey and William C. Symonds in Provo, Utah



**"IF THE LEVEL OF OUR HEAT
WAS \$1, THE LEVEL CLAIMED BY
THE UNIVERSITY OF UTAH WOULD
PAY OFF THE NATIONAL DEBT"**

STEVEN E. JONES
ASSOCIATE PROFESSOR OF PHYSICS
BRIGHAM YOUNG UNIVERSITY

minds. Jones successfully produced low levels of fusion in the early 1980s using particles called muons as catalysts. But he wondered if other particles might do the trick as well. When he presented his theories at a BYU faculty colloquium in March, 1986, geophysicist E. Paul Palmer jumped up to suggest that such fusion might occur



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aside. "He apologized," Jones says, adding that Fleischmann explained that there was enormous pressure from administrators at the University of Utah to hold the press conference.

BETRAYAL? For their part, University of Utah officials deny that they betrayed a deal with Jones. "There was never an institutional agreement about collaboration or back-to-back papers," says Brophy. Utah's official explanation for calling a hurried press conference is that the results were leaking out.

Once the news broke, the race was on. At first it looked as if the experiment would be duplicated quickly. Scientists in Texas, Georgia, Hungary, Moscow, and elsewhere said they had found signs of fusion—heat or the neutrons that would be formed in a fusion reaction. A research group at the Georgia Institute of Technology held a press conference shortly before the Dallas meeting to say that it had confirmed the experiment. Nuclear engineer James Mahaffey told assembled reporters that seeing cold fusion in his lab was a wondrous experience—"like being there when fire was discovered."

Mahaffey's elation was short-lived. When colleagues later suggested that a laboratory instrument might be responding to heat and giving faulty readings, the Georgia Tech team decided to withdraw its results and redo the experiment. On Apr. 25, the researchers said their subsequent experiments had failed.

Indeed, many scientists have felt their pulses race only to have their hopes dashed. At Lawrence Livermore National Laboratory in California, physicist Keith Thomassen watched in amazement one Saturday when the needle on his laboratory neutron counter jumped, indicating possible fusion. But within minutes, Thomassen discovered that the instrument was simply responding to rising room temperature.

R. D. Haun, chief scientist at Westinghouse's Research & Development Center in suburban Pittsburgh, was thrilled when he was told during a trip to Minneapolis that there had been a fire in his lab. "I thought: 'We've lost the lab, but the experiment worked,'" Haun recalls. Even when he heard that the blaze had been touched off by a short circuit, he was still hopeful. "I thought it might be a cover story," he says. It wasn't.

As experiments continue to fail, frustration with Pons and Fleischmann is mounting. Initially, scientists were irri-

tated that the team had announced only sketchy details of the experiment—and before publishing a paper in a scientific journal. The first documentation the pair did publish wasn't much help. Scientists who obtained draft copies of a paper rushed into print by the *Journal of Electroanalytical Chemistry* in Lausanne, Switzerland, still complained of a lack of detail. And the team's credibility took another hit when Pons and Fleischmann withdrew an account of their work from *Nature* after reviewers raised numerous questions about the experiment.

The work "was sufficiently flawed that it didn't pass peer review," says Deputy Editor Peter A. Newmark. But

paper, however, was published in the Apr. 27 issue.

Pons and Fleischmann insist that they have given out all the details of the experiment. The problem, they say, is that they don't know all the variables either. "We think it has to do with processing the palladium electrodes," says Pons. But he insists that "a number of people have come up with similar results and haven't announced them." He put the number at 60, though he won't identify them. "I don't know who they're talking to—maybe Slippery Rock College," says physicist George Chapline of Lawrence Livermore.

What's more, other scientists have criticized the pair for what they consider sloppy science. At the Apr. 12 chemical society meeting, physicist Harold P. Furth, director of Princeton's Plasma Physics Laboratory, challenged the chemists to perform a control experiment using regular water, which fusion should not occur.

A common reaction was surprise that the crucial test had not already been conducted. "It's incredible that they would call a press conference before doing the control experiment," says Chapline. But Pons defends his methods, saying that they performed other kinds of control experiments.

COMPETING THEORIES. Meanwhile, theorists have been scrambling to come up with explanations for the results claimed by the Utah chemists. Berkeley theoretical chemist K. Birgitta Whaley rushed to the Dallas meeting to present her idea that what Pons and Fleischmann were reporting could be explained by a phenomenon in physics called "boson screening" in which the movement of deuterium ions inside the palladium

would block the repulsive force that prevents individual atoms from fusing.

Whaley, however, came in neck-and-neck with Peter L. Hagelstein, a brilliant, reclusive physicist from MIT. Physicists had argued that if Pons's reaction produced the amount of heat he said it did, radiation—enough to kill the experimenters—should also have been produced. Hagelstein, however, pumped out a series of calculations showing how the fusion reaction could produce an unexpected form of helium without releasing radiation. Instead, the helium would give its energy to the palladium as heat.

On Apr. 12, MIT officials announced Hagelstein's theory at a press conference in Cambridge, saying that they had



**PETER L. HAGELSTEIN OF MIT
SUPPLIED MATHEMATICAL PROOFS
THAT THE REACTION
WOULDN'T HAVE TO RELEASE
RADIATION—JUST HEAT**

Pons claims not to be upset. Since the paper was intended to proclaim the discovery, "it didn't make sense to announce what had already been published," he said after the Apr. 24 press conference. "They gave us a chance to write a more substantial paper, but we didn't have the time to do it." Jones's



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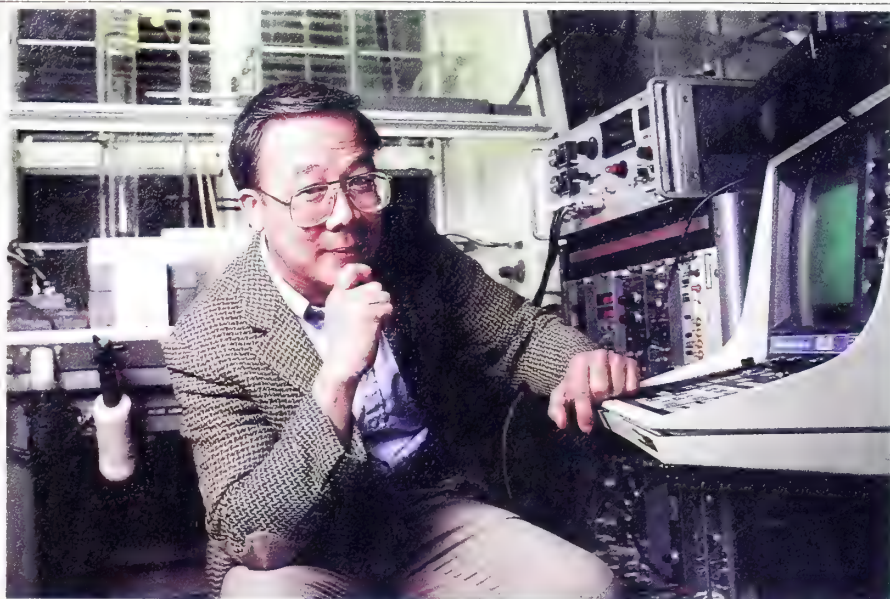


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AT ARGONNE LAB, THE BOTTLE COMES UP EMPTY



Carlos Melendres, a physical electrochemist at Argonne National Laboratory, first heard reports of cold fusion on his car radio on Mar. 23. Charles C. Baker, head of Argonne's large fusion-power program, read about the claims of B. Stanley Pons and Martin Fleischmann in the newspapers the next morning. "Our first reaction was enormous skepticism," says Melendres. "But Fleischmann is a very respected electrochemist, and we couldn't discount it."

Over the next few days, Melendres and five other groups of researchers at the Illinois research center joined thousands of scientists around the world in trying to get more data about the experiment in order to repeat it in their labs. Messages zipped across the scientists' international computer networks, and when a top Argonne administrator obtained a photocopy of the then-unpublished first paper by Pons and Fleischmann, Melendres went out in a downpour and drove straight to his lab. "I didn't bother to wait for it in the interoffice mail," he says.

LONG DAYS. The researchers scrounged through Argonne's supply rooms to find palladium rods of the size needed to duplicate the electrodes used by Pons and Fleischmann. After several false starts, they got under way. Days stretched from 6 a.m. until midnight. Melendres and his colleagues worked under what he believes were conditions nearly identical to the Utah team's.

**'WE HAVEN'T FOUND ANY EFFECT
WE CAN ATTRIBUTE TO FUSION.
THE CONDITIONS WERE RIGHT. WE
SHOULD HAVE SEEN SOMETHING'**

CARLOS MELENDRES
PHYSICAL ELECTROCHEMIST
ARGONNE NATIONAL LABORATORY

But after a month, says Melendres, "our experiments have not found any effect we can attribute to nuclear fusion. The conditions were right. We should have seen something."

Another team, led by Martin J. Steindler, who heads the chemical technology group, "worked as hard as they did when they were graduate students." But it found no signs of fusion, either. "We don't see neutrons above background levels, and we don't see gammas," says Steindler. "We don't see any significant temperature rises of our electrodes."

Steindler adds that "there are half a million things that could explain the things people have seen." But for now, the Argonne teams vow to keep working. If cold fusion is proven, "it would be unbelievable," says Baker. "It would be the discovery of a century, without a doubt. That's what makes it so much fun."

By Julia Flynn Siler in Chicago

applied for patents based on his ideas. A few days later, Utah chemist Chever Walling presented a similar theory and said he had found evidence of the same helium isotope in Pons's electrodes.

Nonetheless, many scientists still believe that the vision of vast amounts of power from cold fusion is nothing but a mirage. Quips MIT engineer Lawrence N. Lidsky: "My theory is that this reaction can only be replicated at a school with a good football team." Indeed, the initial rush of enthusiasm is fading fast in many labs. "It's becoming senseless. Nothing is happening," complains Jaap Rem of the FOM Institute for Plasma Physics in the Netherlands.

As the furor subsides, though, some researchers are vowing to continue the experiments until answers are found one way or the other. A number of well-respected laboratories have set up careful experiments, complete with controlled 24-hour-a-day monitoring, and other precautions. "Discoverers make mistakes as they rush their discoveries to the public," says Tokyo University of Agriculture & Technology electrochemist Noboru Oyama. "It's up to those who come later to be more careful."

Tantalizing reports that have not yet been discredited continue to trickle in. Stanford University materials scientist Robert A. Huggins announced that, with the help of a picnic cooler scavenged from his garage, he had verified the Utah researchers' original claim. His experiment was pumping out energy, he said, while a control of plain water was only consuming it. So many callers tried to reach Huggins on Apr. 19 that Stanford's voice-mail system overloaded.

'SWITCHOVER.' Pons and Fleischmann have been slowly winning some converts. Physicist Michael Danos of the National Institute of Standards & Technology was one of the Utah team's severest critics. Then he took a long, hard look at the theoretical underpinnings of cold fusion. "I've made a complete switchover," he says. "In my view, there is no doubt that direct fusion does take place, and Pons may be seeing it."

If that's true, a scientific revolution may be brewing. A computer bulletin board for scientists recently carried the following notice: "For sale—slightly used tokamak, \$1 billion or best offer. Ask for Al." Then again, Al shouldn't be too hasty. The hope that cold fusion is the answer is understandable, but the doubts about it are reasonable. The scientific jury is still out.

By John Carey in Salt Lake City and William D. Marbach in New York, with Neil Gross in Tokyo, Mark Maremont in London, William Symonds in Provo, Utah, and bureau reports



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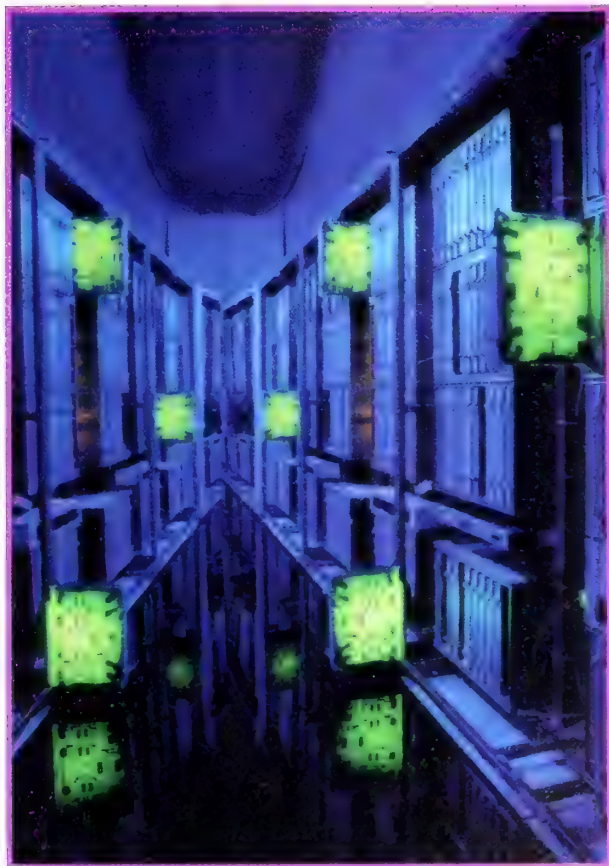
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Developments to Watch

EDITED BY EMILY T. SMITH

EXCUSE ME, MY POCKET IS RINGING



Everyone, E. T. included, will find it easier to phone home with Motorola Inc.'s new ultralight portable cellular phone. At a mere 12.3 ounces, including a battery, the Micro TAC has shed half of the weight of Motorola's current portable phone. At wallet-size, it's also half as bulky as other portables. The price tag isn't tiny, though: \$2,995 vs. \$2,695 for a Motorola 26-ounce portable.

Even so, Motorola is betting that cellular customers who like to travel light will ante up. "It's the difference between having one pack of cigarettes, which fits into your pocket, and having two put together, which aren't nearly as convenient," says Robert Weissshappel, general manager of Motorola's North American cellular subscriber division. What's more, the little phone could help the cellular market take off. Weissshappel predicts that the number of U.S. customers will double to nearly 4.5 million in two years and that at least half of the new users will opt for portable phones. The Micro TAC, which flips open for use like a Star Trek communicator, offers the same features as larger models. Motorola figures the Micro TAC puts it at least 18 months ahead of a comparable product from competitors Mitsubishi Corp. and Panasonic Co.

A NEW RECIPE FOR SUPERTHIN SEMICONDUCTORS

Almost as soon as scientists discovered so-called high-temperature superconductors two years ago, they tried to make electronic devices out of the materials. In April, that effort took an important step forward when Emcore Corp. in Somerset, N.J., announced that it had developed the first commercial machine to manufacture semiconductor wafers from the superconducting ceramics.

The machine creates a vapor of a superconductor called 1-2-3 and deposits it in layers only a few atoms thick on a metal base. Du Pont Co. is the first to sign up for the machine, which will cost from \$500,000 to \$1 million. Although several other technologies can be harnessed to produce superconducting thin films, "we think this technology will ultimately be the preferred one," says Emcore Vice-President Peter E. Norris—because similar vapor-deposition machines are the dominant technology used to make silicon chips.

WASTE PLASTIC IS NO LONGER WASTED

Recycling paper, glass, and metals is routine in many communities, mandatory in some. Until recently, however, little effort was directed at preventing the 11 million tons of plastic that Americans throw out each year from getting into garbage dumps and landfills. On Apr. 25, plastics recycling got a big boost when Du Pont Co. and Waste Management Inc. announced a joint venture to collect and process plastic refuse.

The venture will reclaim plastics at a \$5 million facility expected to open next year. Du Pont will apply its blending and polymer-alloying technologies to turn the plastic waste into new materials for the auto, appliance, and construction markets. For Du Pont it's an almost unbeatable deal: It costs \$1.25 to \$1.50 per pound of capacity to build a new plant to produce certain polymers, but only about 15¢ per pound to recover them. For Waste Management it's an incentive to collect plastics from the 8 million households that already separate their paper, glass, and metals. "This venture is the missing link in plastic recycling," says Phillip B. Rooney, president of Waste Management. "It will demonstrate that plastic can be efficiently diverted from municipal waste and put to productive reuse."

HYDROGEN SUBS CAN REALLY RUN SILENT, RUN DEEP

For nine months last year, the first submarine powered by hydrogen cruised the Baltic and North Seas. The trial went so well that the West German navy now intends to put a dozen of the hydrogen-powered submarines in service by the mid-1990s. Bonn's Defense Ministry declines to comment on plans for the new subs, but an official at Ingenieurkontor Lübeck, which designed the system, confirms the order.

The subs will be powered by fuel cells that produce electricity by combining hydrogen and oxygen in an electrochemical reaction. The fuel cells produce almost no noise or heat, thus helping the subs to slip through the water undetected. A hydrogen-powered sub can stay submerged for several weeks at a time, while conventional diesel-powered vessels can cruise underwater for only about a week. The hydrogen fuel cell can be adapted to almost any size submarine. And existing subs can be retrofitted with the new fuel cells. Howaldtswerke Deutsche Werft of Kiel and a shipyard in Emden owned by the German Thyssen Group will build the new subs.

BLACKING OUT BRIGHT LIGHT IN A FLASH

James L. Fergason is at it again. In 1970, he invented liquid crystal displays. Today he holds 60 patents on that technology, and it's used in some 5 billion items, including watches and calculators, every year. Now he's figured out how to make liquid crystal cells that will switch from clear to opaque in a lightning 1/20,000 of a second when hit with bright light. He's done that by constructing the crystals so that only the surface layers of atoms make the change.



To apply the technology, Fergason founded Optical Shies Ltd. in Menlo Park, Calif., which develops devices to protect eyes and sensors from bright light. "The shutters can switch fast enough to protect eyes from all manner of flashes," says Fergason. Recently the company started supplying protective lenses to Goryus Corp. for welders' helmets. But such gear may meet an even more critical need for the military. Nuclear and laser weapons produce flashes that can temporarily or even permanently blind crews in airplanes and tanks. The company has signed two contracts with the Defense Dept. to develop protection devices for those battlefield contingencies.

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Revenues and Sales	\$1.1 billion
<i>Reported</i>	
Net Income	\$125 million
Earnings Per Share	\$2.91
<i>From Operations*</i>	
Net Income	\$134 million
Earnings Per Share	\$3.13
Dividend Rate	\$1.72
<i>Average Common</i>	
Shares Outstanding	42.3 million
<i>*Excludes Other Time Acquisition*</i>	
Ticker Symbol: AT Listed on the New York and Pacific Stock Exchanges.	

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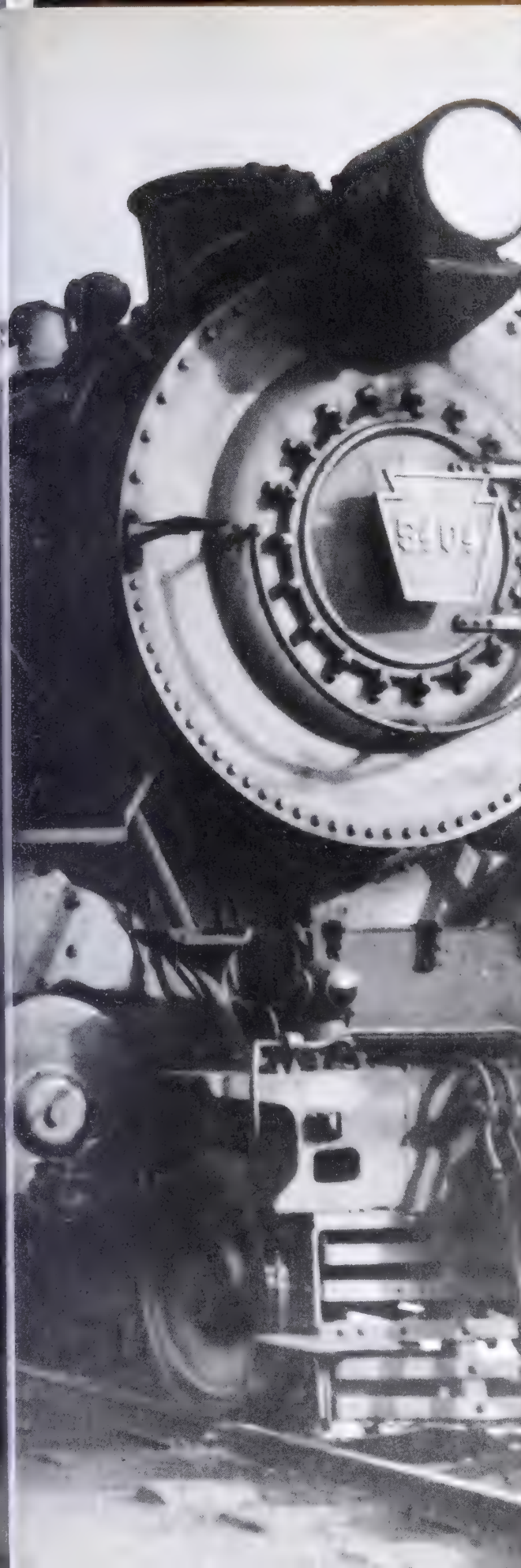
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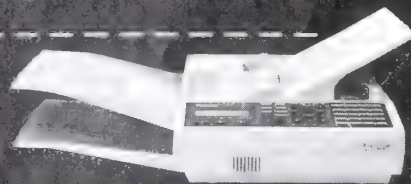
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AL NEUHARTH IS A TOUGH ACT TO FOLLOW

With Gannett's go-go days over, CEO Curley must cut costs

When he was chairman of Gannett Co., Allen H. Neuharth always wore black and white clothes. But now that he's easing into retirement, Neuharth has added a splash of bright red. There may be more symbolism to the color scheme than the former chairman intends. So far, Gannett has been able to sustain its two-decade-long streak of earnings growth, but some of Neuharth's pet properties—the *Detroit Free Press*, *USA Today*, and a spinoff TV network—are displaying red ink.

Neuharth retired as chairman on March 1 and planned to give up his board seat on April 27. His successor, John J. Curley, will have to figure out how to keep Gannett's earnings growing. "The challenge for Curley is to maintain the double-digit growth at a time when acquisitions are hard to find," says First Boston Corp. analyst R. Gruneich.

Neuharth's chief executive position over the past three years, the 50-year-old Curley has hewed to Neuharth's course. But with slower growth in newspapers and doubts that *USA Today* and some TV networks will pay off, Curley may have to change direction. Gannett's net earnings—which included a \$45 million gain on the sale of a stake in Cowles Media—increased 14% last year, to \$364 million, on sales of \$3.3 billion, a healthy return on equity. Gannett is off to a strong start this year: Operating earnings jumped 24% in the first quarter.

Curley's biggest problem: turning *USA Today* into a money-maker. With two ad rate hikes planned, the paper "has a chance at breaking even" in 1989, says Gannett financial officer Douglas H. Workindale. Goldman, Sachs & Co. expects a profit (table), something Gannett promised in 1988 but didn't deliver, largely because of the special expenses

it incurred covering the Olympics and election campaigns. But advertising pages fell at least 2% last year. In the first quarter of this year, ad pages fell 8%. And the paper lost \$6 million, compared to \$11 million in the year-earlier quarter.

At other newspapers, Curley will emphasize more aggressive cost-cutting and more autonomy by local managers. He has slashed the staff at headquarters in Rosslyn, Va., through attrition or by putting corporate employees to work on Gannett's local papers. There are now fewer "circuit-riders"—managers traveling to check on Gannett's properties.

Although Curley is cutting costs at headquarters, he's willing to spend money to improve and expand Gannett papers. His aim is twofold: to change the long-held industry view that Gannett papers look slick but offer mediocre journalism and to justify higher ad rates by attracting more readers. At the *St. Cloud Times* in Minnesota, for example, a Sunday edition was started in May, 1988. Already, its circulation has reached 34,000, compared with the daily's circulation of 28,500.

TAXIS AND BICYCLES. Consolidation and cost-cutting might have occurred even without a management change. One reason: It would be difficult to duplicate the acquisition binge in the 1970s and 1980s, when Neuharth spent close to \$1.5 billion to gobble up newspapers from coast to coast. Under his command, Gannett grew from an obscure newspaper group to the nation's largest owner of daily newspapers, with a combined daily circulation of 6.3 million.

Those who know him say Curley's quieter, more focused style may be just what Gannett needs. Curley is an intense, cerebral manager whose affability masks an innate toughness. What's more, he knows the news business from the reporter's terminal to the delivery chute.

There are a number of differences between Curley and Neuharth. "Al likes limos and corporate jets," says Peter S. Prichard, editor of *USA Today*. "John is happy with taxicabs and bicycles." But both worked their way through newsrooms and share the reporter's obsession with detail.

"When *USA Today* was launched, Al was very visibly in the streets checking the boxes" on corners all over Washington, recalls John Seigenthaler, editorial director for *USA Today*. "Curley was doing the same thing on the telephone to distant cities."

Curley does not suffer fools gladly. "I tend to be less willing to listen to people tell me the same thing two or three times," Curley says. "I'm more likely to act quickly." A willingness to follow his own judgment will be useful this year when Curley has to decide whether to pull the plug on the *USA Today* television show. The program was launched in 1988 to abysmal reviews criticizing its



CURLEY: TOUGH TESTS AT *USA TODAY* AND IN TV

GANNETT: THE HOUSE THAT ALLEN NEUHARTH BUILT

Properties	Revenues 1989 estimates in millions	Operating Income
LOCAL NEWSPAPERS	\$2,528	\$668
USA TODAY	335	2
TV AND RADIO STATIONS	415	110
TV PROGRAMMING	15	-21
BILLBOARDS	270	47
CORPORATE OVERHEAD	--	-80
TOTAL	\$3,563	\$726

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Media

lack of punch; it was reworked in January, presumably to emphasize news. Although ratings have increased a bit, the show's future is very much in doubt.

The show is only one of the failures of GTG Entertainment, Gannett's two-year-old programming partnership with former NBC Inc. Chairman Grant A. Tinker. GTG sitcoms *The Van Dyke Show* and *Raising Miranda* made quick exits from the screen. The drama *TV 101* lasted a bit longer but died recently, the result of terminal indifference. On the positive side, Gannett is making money by renting out GTG's Culver City studios and soundstages. But the net loss on the whole GTG deal could still reach \$21 million this year, according to Goldman Sachs analyst Eric Philo.

DOMINANT PLAYER. There's no comfort to be found at Gannett's 10 TV stations. They posted a meager 1% gain in revenue last year. First-quarter revenue rose 9.7%, the result of additional income from two stations Gannett bought in Jacksonville, Fla., and Greensboro, N.C. By contrast, outdoor advertising, which Gannett is the dominant player in the U.S., is expected to post double-digit revenue gains this year, aided by the July, 1988, acquisition of New York Subway Advertising Co., a major urban mass-transit billboard company.

But newspapers still provide the bulk of Gannett's operating profit—close to 90% in 1988. And that isn't likely to change under Curley. Although media experts questioned Gannett's wisdom when it bought the money-losing *Detroit News* as part of a newspaper-and-TV deal worth \$717 million, the purchase no longer looks pretty good. True, the *News* lost as much as \$3 million a quarter by some estimates, but the hemorrhaging could stop under a proposed joint-operating agreement with Knight-Ridder Inc. *Free Press*. That would let the papers share profits while maintaining independent editorial staffs. The U.S. Supreme Court is deciding whether to block the deal, but none like it has been stopped before.

One thing Curley doesn't foresee is Gannett involvement in the kind of international media mergers that have been common of late. Still, the company keeps an eye out for domestic properties. Curley says he feels no pressure to do a deal for the sake of it. "You can build revenue all the time," he says. "That's no trick. We're going to stay with what we know."

That may not be Neuharth's way. But with the problems he left behind, Curley has little choice.

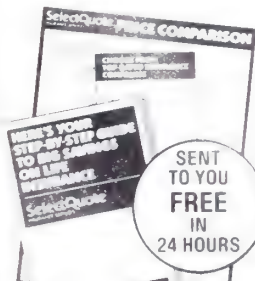
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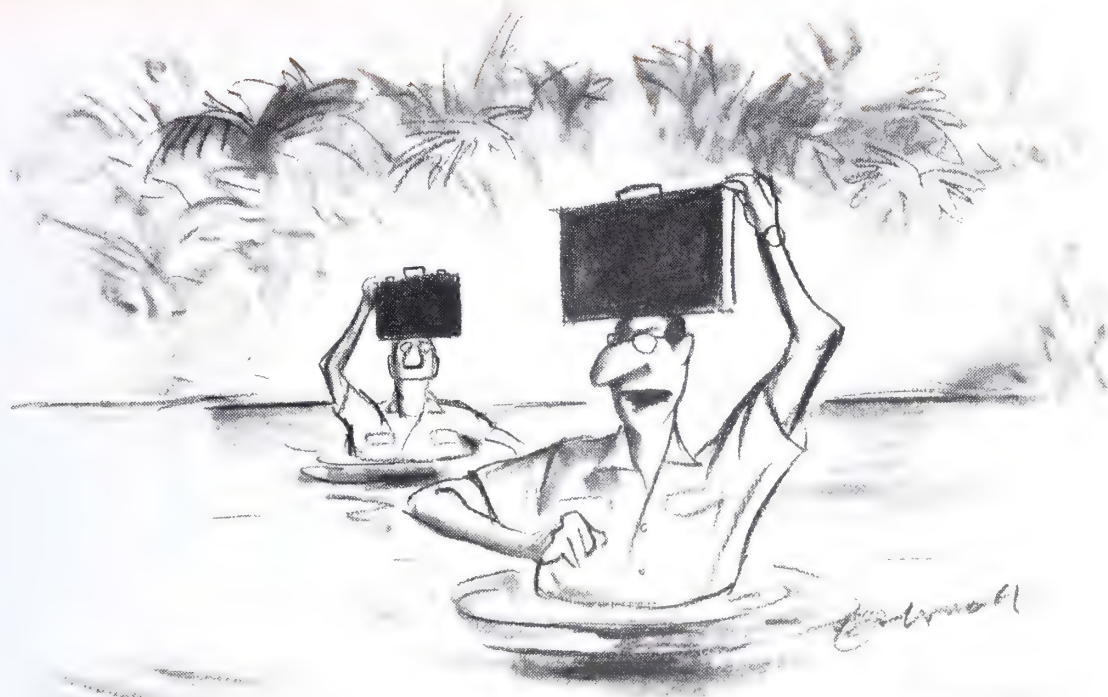
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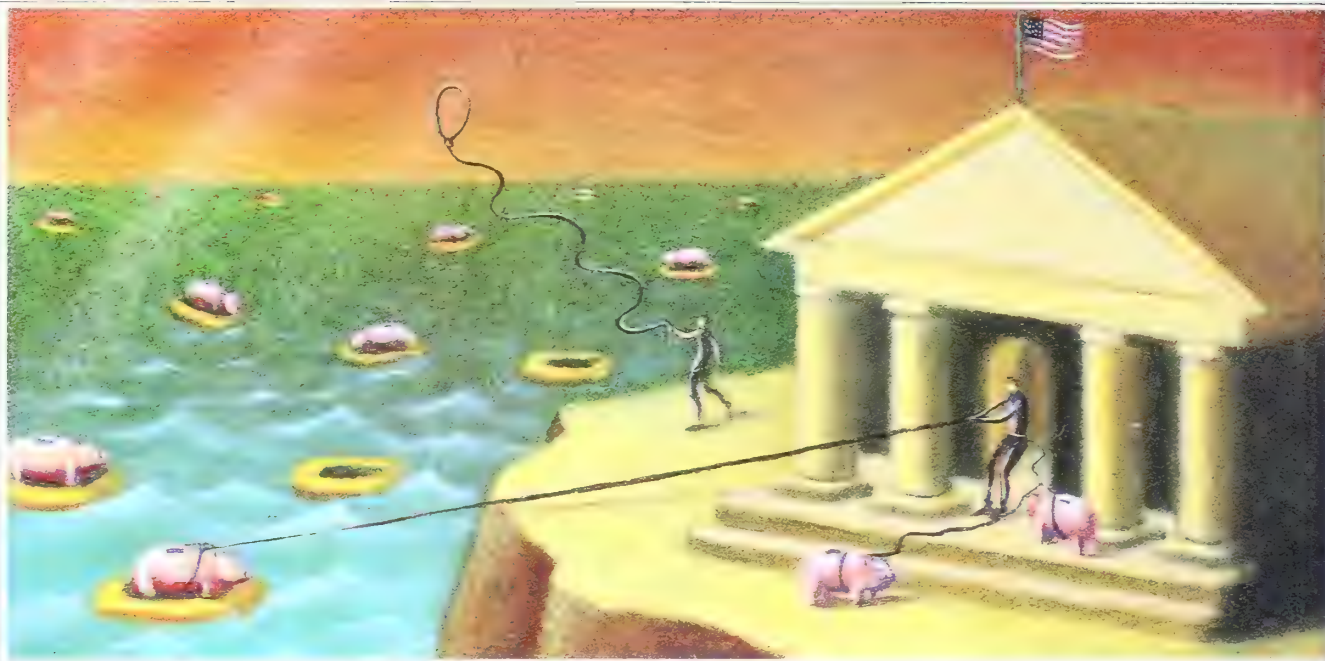


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ONLY THE STRONG WILL SURVIVE THE THRIFT RESCUE

All but superthrifts and niche S&Ls will disappear under Congress' strict new measures

Savings and loans boomed. Then they swooned. That was the 1980s. But, alas, the 1990s aren't likely to start out any more serenely. The business is headed for a massive shakeout.

As Congress finishes work on President Bush's \$50 billion plan to revive the thrifts (table), analysts and industry executives increasingly believe the project will be more triage than rescue. But while no one argues that all the critically ill thrifts should be saved, a growing number of observers feel Washington has not yet faced up to the full costs of letting them go under. San Francisco consultant Dan Brumbaugh estimates that "at least" an additional \$60 billion will be needed.

'STRONG DOSE.' In any case, in a few years half of the nation's 3,000 thrifts could disappear. The survivors will be dominated by a dozen superthrifts that will provide mortgages nationwide, predicts Richard T. Pratt, chairman of Merrill Lynch Mortgage Capital Inc. The vast majority remaining will be small fry with local-niche businesses or will adapt by

providing services for the giants, Pratt says.

The measures moving through Congress contain much of the program the President proposed in February. Some \$50 billion would be pumped into a new agency that will shutter several hundred unsalvageable S&Ls. Congress also is expected to give the thrifts as little as two

years to boost their capital—the cushion against loan losses—from the current 3% of assets to as much as 6%. "It's a strong dose in a short time period," says Gerald J. Ford, chairman of First Gibraltar Bank in Houston.

The Senate bill, passed on April 1, tries to lessen the sting by stipulating that only a quarter of the capital has to be tangible—primarily equity and retained earnings. The rest can include such intangibles as goodwill. Currently, all of a thrift's capital can be intangible. Even with the Senate's leeway, hundreds of thrifts won't make the first cut. According to Fergusson & Co., 686 of the 3,000 S&Ls couldn't comply.

Thrifts looking to raise more capital will find the going rough. Unprofitable and marginal thrifts won't be able to boost capital through retained earnings. Stock offerings are "a difficult proposition unless you're showing good profits," says CEO Bo McMillen of San Antonio Savings.

Compounding the S&Ls' problems

HOW WASHINGTON WANTS TO RESHAPE THE S&Ls

Congress is still rewriting the rule book, but here's what it sees for the industry's future

MARCHING ORDERS Surviving thrifts must get back to basics, depending mainly on consumer deposits and devoting up to 80% of their assets to housing

REDUCTION IN FORCE Many more thrifts will be closed down or gobbled up by rivals, thinning the ranks to about 1,000 in five years from a peak of 4,500 in 1966 and 3,000 today

REGULATION The Treasury and the Federal Deposit Insurance Corp. will take charge as the Federal Home Loan Bank Board is killed off

SOUNDNESS By 1991, thrifts must boost capital from 3% to 6% of assets, the same as commercial banks

DATA BW

as are the new limits that discourage em from dabbling in nontraditional rtures—such as real estate develop- nt—and force them back into the rtgage business. Under the Senate , S&Ls must continue to hold 60% of ir assets in mortgage-related activi- s. Commercial real estate lending uld be limited to four times a thrift's ital, instead of the current 40% of ets. The House may go a step further compelling S&Ls to keep as much as % of their assets in mortgage and con- ner loans.

Executives of some healthy thrifts try that this narrowing of S&L activi- will cut into earnings and drive ay potential investors. "If you require re capital and limit the areas of in- tment allowed, you're going to eeze the profitability of the busi- s," says Robert F. Adelizzi, president of Home Federal Savings & Loan Assn. San Diego, which would be forced to est some of its profitable real estate estments under the new rules.

BEGOTTEN NOTION. While forays into dmill farms and the like are what did many thrifts, Brumbaugh thinks that attempt to halt speculative ventures ld backfire. He notes that many fts in the early 1980s were whip- ed as the interest rates they had to depositors to lure funds shot higher a those they were collecting on fixed- mortgages. In this sense, he says, a misbegotten notion that S&Ls will ore profitable and safer" when they k to mortgages.

awmakers hope that the industry can some salvation from outsiders, par- larly banks. Both the House and Sen- bills would let banks acquire thy as well as sick thrifts. ere's plenty of opportunity he savings and loan indus- ' says J. Carlsen Huey, se- vice-president for Citizens & thern Corp. in Atlanta. C&S, which is ing for a stake in the growing South t area, has a \$27 million deal pend- to buy First Federal Savings k of Brunswick, Ga. Many thrifts may try to diversify by courting s, says consultant William M. Isaac. ut only a relative handful of thrifts be attractive to banks. Hundreds e thinly capitalized thrifts could slide insolvency. "My guess is that Con- s will have to come back to this e," says Lewis S. Ranieri, owner of ston-based United Savings Assn. of as. Managing to postpone the thrift s occupied Washington for most of decade; managing the crisis itself occupy the lawmakers for much of next decade.

Catherine Yang in Washington, with d Zigas in New York and bureau re- s

THIS YEAR, LBO MEANS 'LET'S BACK OFF'

The megadeal rash has subsided as backers play wait-and-see

Last year, James J. Burke got insti- tutions to commit a cool \$1.5 billion for leveraged buyouts. Against a backdrop of red-hot LBO activity and his record of large, successful deals, this wasn't too difficult. Today, Burke, the chief executive of Merrill Lynch Capital Partners, still has 90% of that money in reserve, waiting for the right deals to come along.

Capital Partners is not the only LBO firm with a hoard of uncommitted cash. After a frenzied 1988, the LBO market has slowed down. LBO deals hit a record \$36.8 billion in the last quarter of 1988. Even without the \$29.6 billion RJR Nabisco Inc. blockbuster, they would have totaled \$7.2 billion. But this year's first quarter saw just \$3.4 billion worth of deals announced, according to IDD Information Services Inc. "The craze is behind us," says Arthur Nagle, chairman of Vestar Capital Partners Inc., an LBO firm.

It isn't Congress, as many LBO practitioners feared, but the Federal Reserve Board that has put on the brakes. Last year, LBOs of large public companies thrived on interest rates as low as 9.5%. Now, with the prime rate

at 11.5%, taking companies private through hefty debt is often turning out to be prohibitively expensive. And after a year of bargain prices, many stocks are flirting with their precrash highs. "Right now, you have the worst combination of high prices and a high cost of financing," says Burke. "A lot of large deals are getting looked at, but not many are consummated."

JUNK-BOND JEOPARDY. The outlook is not all bleak. This year's first billion-plus LBO was announced in April: the \$1.2 billion buyout of Grand Union Co. And in the next few weeks, there could be multibillion LBOs of NWA Inc. and TW Services Inc., both of which are in play.

Indeed, if interest rates fall or if the stock market tumbles, the LBO market could come back quickly. But even optimists predict that 1989 will be off about 20% from last year's pre-RJR Nabisco pace, says Daniel J. Good, a former Shearson Lehman Hutton investment banker who now runs Good Capital Co.

Big LBOs also have suffered from a dearth of hostile bids. When raiders attack, LBO firms can play white knight and rescue the company by taking it private. Now that the

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Finance

number of hostile deals is down, so is the number of LBOs. Says Martin H. Dubilier, chairman of Clayton & Dubilier Co., an LBO firm: "No one is doing large, controversial deals."

The legal problems facing junk-bond kingpin Drexel Burnham Lambert Inc. are key in cooling hostile bids. "Well over 50% of the raiders are Drexel-backed. So, to the extent raiders themselves decide to lie low or they can't get Drexel to finance them, the business has slowed up," says one LBO player.

The fallout from the RJR Nabisco deal is putting another damper on the market. Commercial banks and the junk-bond market are still digesting the massive financing, which will not be completed until sometime in May. Lenders are more cautious, especially about marginal deals. Says James H. Reinhardt, a senior associate at Wilshire Associates: "It's tough to get a deal financed when banks say, 'Well, we'll answer your call in a few months, after we syndicate the debt for RJR.'"

Ironically, the dreaded political storm in Washington over the megadeal has proved to be a tempest in a teapot. After the Bush Administration decided not to initiate action, the congressional leadership has proved unequal to the task. Congress, faced with such a complex issue, can't agree on what the problem is, much less come up with a solution. It is still going through the motions, however: The House Ways & Means Committee has compiled a list of possible legislative remedies and will continue to hold hearings. But only modest changes stand much chance of passage. "Absent a real horror story or yet another RJR deal, there doesn't seem to be the mood to tackle this," says a Hill staffer.

STORMY WEATHER. Political sensitivities are more apparent among the public and corporate pension funds that bankrolled the LBO boom, providing most of the money for the equity portions of the deals. The pension-fund managers who drove the LBO market are backing away from it and are putting very little new money into the pools that LBO firms use to buy companies. "Fund-raising among pension funds has been the slowest in five years," says Robert F. Johnston, president of Beacon Hill Financial Corp., a Boston firm that specializes in LBO financing.

LBO firms have not run out of cash: Existing pools boast a hefty \$15 billion to \$20 billion, which translates into about \$200 billion of purchasing power. Even though pension funds are not rushing to commit new money, they are staying in the game. Indeed, to cover the overhead cost of searching for deals, they're willing to pay the LBO firms an-

nual commitment fees of 1% to 2% of the capital they've pledged.

But the whole system is "gridlocked," says Beacon's Johnston. New equity money won't flow in from pension funds until uneasiness about the RJR Nabisco deal and the possibility of congressional action subsides totally. It hasn't yet. After 10 years of participating in Clayton & Dubilier's LBO funds, the World Bank's pension fund decided recently not to renew its \$15 million commitment. Despite averaging gains of 100% per year on LBOs, the 151-nation agency clearly senses that the political climate is not right for further LBO investment.

Some states, including Michigan, have passed legislation prohibiting state pension funds from investing in LBOs,

**Congress can't seem
to agree on what the
problem is—much less
come up with a solution**

grounds that LBOs often result in employee layoffs. Corporate directors are nervous, too. Their nightmare: An LBO fund holding company pension money makes a hostile bid for their company. RJR Nabisco's pension fund had money invested in Forstmann Little & Co., an LBO firm that showed up as a bidder.

Skittishness among U.S. pension funds has forced LBO firms to look elsewhere for sources of equity. Wasserman Perella & Co., for one, raised one-third to one-half of its \$1 billion LBO fund from Japanese banks.

While deals involving big public companies have slowed, there is still a lot of LBO activity. Buyouts are still being done in the range of \$50 million to \$1 billion. Most common are deals less sensitive to interest rates and the stock market, such as divestitures of divisions. Resales of companies that have gone private before are also continuing, with the LBO alternative to a new public stock issue.

Despite the slowdown in new deals, don't expect layoffs in LBO-land. Even the largest LBO firms have 20 professionals at most on staff. Their wages and other fixed costs are covered by their 1% to 2% commitment fees. And now is prime time for established firms to keep busy by selling off some of their portfolio of companies. For riding out the interest rate cycle, the LBO business is positioned better than most others on Wall Street.

*By Louis J. Vachon in New York and
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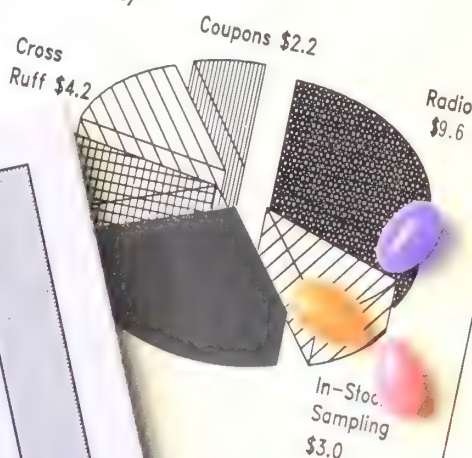
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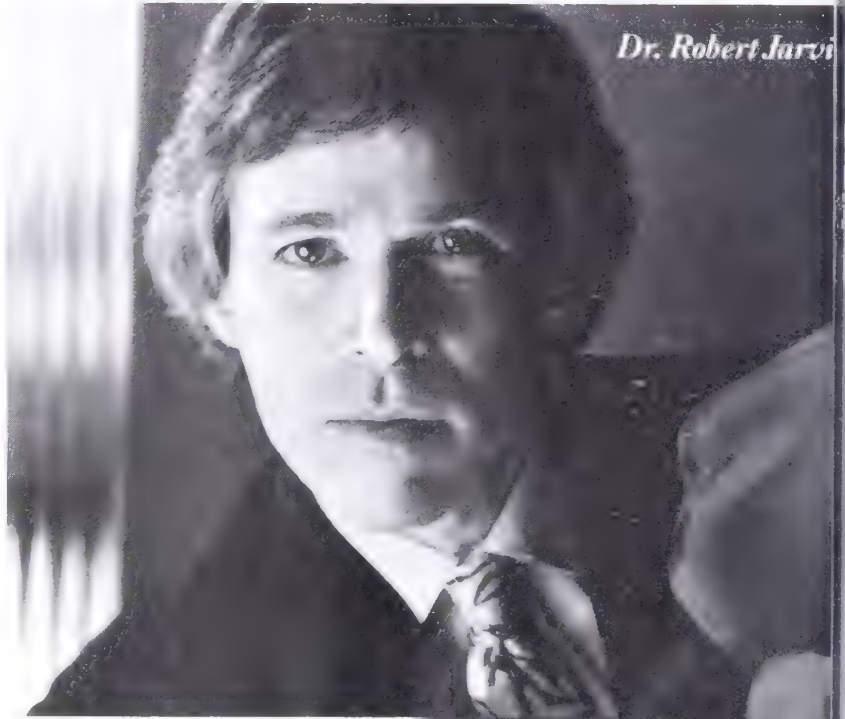
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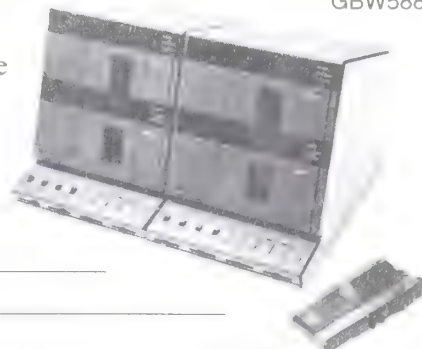
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LOUIS KELSO'S BABY IS MAKING DADDY PROUD

ESOPs are hot—and his firm wants to rescue NWA with one

When Louis O. Kelso approached the University of Colorado's economics department in 1934, he was rebuffed by the chairman as a "troublemaker" for blaming the Depression on economists. Kelso enrolled in finance and law, a combination that led to a revolution: He devised the employee stock-ownership plan as a tool to spread the nation's wealth.

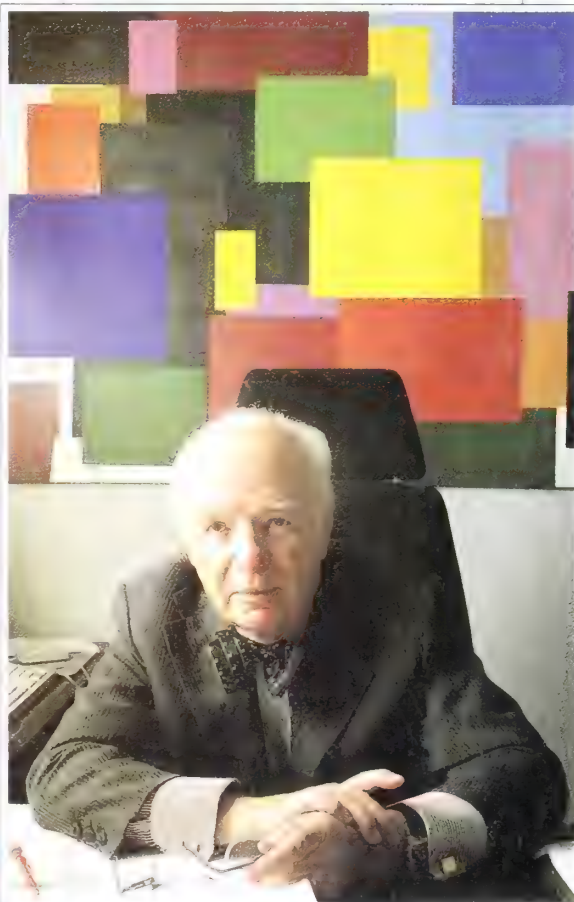
More than 30 years after his first deal, the father of ESOPs is gratified by the recent headlong rush of major corporations such as Procter & Gamble, Texaco, and PPG Industries into employee stock plans (BW—Mar. 20). Kelso & Co., the merchant banking firm Kelso started in 1970 to promote his concept, has been sitting out much of this recent boom. But the New York-based firm may soon reenter the market with a friendly bid for NWA Inc., the parent of Northwest Airlines, and the target of a hostile bid by Los Angeles investor Marvin Davis.

PASSIONATE. The return to big-league ESOPs would make Kelso a happy man. Although co-chairman of Kelso & Co., he hasn't run the firm for many years. Contemplating the burgeoning ESOP industry from his San Francisco office, he dismisses criticism of companies that install ESOPs largely as a takeover defense. "Big companies are doing the right thing for the wrong reasons," says Kelso, still passionate about ESOPs at 75. "But that's a whale of a lot better than doing the wrong thing for any reason I know."

The kind of ESOP that is flourishing now is Kelso's original brainchild—the leveraged ESOP through which a company takes out loans secured by its own assets and places an equivalent amount of stock in trust for employees. Stock-ownership plans enable employees to bootstrap themselves up from a workaday existence, Kelso argues. Indeed, the amount of capital borrowed by U.S. ESOPs has soared fifteenfold, from \$1.2 billion in 1986 to an annual rate of about \$18 bil-

lion in the first quarter of 1989, according to the Center for Employee Ownership in Oakland, Calif.

But like many pioneers, Kelso & Co. mined little of the vein it discovered. In 1985, the Labor Dept. derailed Kelso's \$600 million ESOP buyout of Cleveland-based Scott Fetzer Co., charging that the deal's structure gave management and outside investors a bigger share of



ESOP INVENTOR KELSO: STILL THE WORKER'S FRIEND

equity than employees for less cost. Since then, Joseph S. Schuchert, 59, a corporate attorney who became chief executive officer in 1977 and later co-chairman of Kelso & Co., has concentrated on leveraged buyouts and steered clear of leveraged ESOPs. The Labor Dept. has yet to put forth guidelines on the allocation of equity in leveraged ESOP deals, as it has promised since 1986. Until it does,

"we're still in never-never land, and we avoid experimentation," Schuchert vows.

Well, maybe with one exception: Schuchert told BUSINESS WEEK that Kelso has obtained confidential financial data from Northwest and may make an offer for the beleaguered carrier. If it does, the bid would rival in size Kelso's largest transaction ever—\$3 billion last year for the LBO of American Standard Inc. And it would almost certainly include leveraged ESOP funds—Kelso's first since 1985. Schuchert says the exception might be justified because the ultimate allocation of equity would have to be approved by Northwest's unions. With the unions protecting employees' interests, the Labor Dept. likely would have little grounds for challenge.

'IT'S IRONIC.' Kelso admits he would have more leveraged ESOPs were he running the show: "It's ironic that the firm that

invented the concept is less aggressive" than Drexel Burnham Lambert, Chase Manhattan, and Wesray Capital, he says. The firms and others have found ways to structure leveraged ESOPs without avoiding interference from the government. But for Schuchert, "Scott Fetzer is still an unhealed wound," says Malon Wilkus, president of American Capital Strategies Ltd., another ESOP specialist. Schuchert still insists that the Labor Dept. position was "flawed."

No matter. Schuchert has done well in the straight LBO business. Since 1980, Kelso & Co. has placed about \$7 billion for 33 companies in which the firm typically retains at least 10% of the equity. Return on equity of all funds invested to date has averaged more than 10% a year, sources say. Kelso's celebrity for pioneering ESOPs still carries clout, especially in the firm's efforts to recruit company managers to join its buyouts.

Kelso himself has little time to devote to deals anymore. As a sort of self-appointed ambassador to democratic capitalism, he still works full-time with his wife of 40 years, Patricia, pressing his brand of economics on developers of university curriculums and lobbyists in U.S. congressmen on seven of the

ESOP-like ideas for raising the earning power of workers. Last fall, he spent a month lecturing European bankers and government officials on the virtues of employee ownership. "I'm here to change the national economic policy," he says. "I don't intend to waste my time."

By Jonathan B. Levine in San Francisco, with Leah J. Nathans and John H. in New York

FORD CREDIT IS EARNING TO SAY 'NO'

easy terms sell cars, but loan losses have soared

The banners have been flying over Ford dealerships for weeks, heralding another round of cut-rate financing meant to move slow-selling cars. Not just anyone will be able to snag those 2.9% loans. Financing frenzies of years past have come back to Ford Motor Credit Co. in the form of rising loan losses. As a result, the maker's lending arm is getting fonder about who will get the favor-able financing and on what terms. And Ford Credit makes it too hard to borrow, financing incentives could lose some of their sales appeal. It's not easy for Ford Credit to say no. The financing wing of Ford Motor

"We sort of said, 'We'll slow the world down just a little bit,'" says Ford Credit Chairman William E. Odom.

The credit subsidiary's problem with incentive financing is not rates that are too low. Its parent absorbs the loss by paying the difference between 2.9% and the market rate, about 13%. Trouble starts when loan officers are swamped by applications, and less-qualified ones slip through. In 1986, for example, Ford Credit financed 42.2% of all new Ford cars and trucks sold—about 1.7 million vehicles. That's more than double the number financed only two years earlier.

What's more, losses are still piling up from a program launched in 1985 that

Ford Credit is combating its bad-loan woes on several fronts. It set up a computer system linking more than 2,500 large-volume dealers with the home office, nearly doubled its staff, to 7,000, and opened a new training center.

HAND 'EM OVER. The finance arm is also tougher on five-year loans, which have a higher default rate than shorter-term loans. Ford estimates that a buyer with a five-year loan owes more than the car is worth until the 37th monthly payment. That's because the vehicle depreciates faster than the loan amortizes. Some buyers, learning that their one- or two-year-old cars are worth less than the outstanding debt, simply hand over the keys or stop paying. To discourage five-year loans, Ford now demands larger downpayments and charges 9.9% interest, vs. 6.9% for a four-year loan.

In the context of the entire Ford enterprise, these problems are small. While Ford Credit's earnings declined 17%, to \$564.2 million in 1988, Ford Motor's net income was a record \$5.3 billion. Profits

FORD REVS UP ITS FINANCING ENGINE...



its mission is to give customers theewithal to buy the auto maker's and trucks. The more loans it as, the more cars it sells.

DOWN. But Ford Credit has a fial reputation and a AA credit ratio preserve. No one has suggested its credit rating is in danger of be-owngraded, but while total assets—ly loans—have more than doubled 1984 (chart), credit losses are up y ninefold. And last year's earnings ord Credit turned down for the first in more than a decade, in part be- the company added \$797.2 million n-loss reserves. In 1987, it reserved 7 million.

w the credit company charges high- k customers rates averaging a per- ge point more than normal. And .9% teaser rate, while available on ally all models, is only for those can pay the loan back in two years.

lowered rates and relaxed credit stan- dards to sell more small, fuel-efficient cars and trucks. Part of Ford's efforts to meet federal fleet-mileage standards, it targeted mainly first-time car buyers. It was "finance a flake," says Bennett E. Bidwell, chairman of rival Chrysler Corp.'s automotive unit. Young borrow- ers, sometimes fresh out of college and without a steady job, defaulted at an alarming rate. With manpower tight, col- lection efforts lagged.

After a year or two,
many buyers with five-year
loans simply hand over
the keys or stop paying

at General Motors Acceptance Corp., which is plagued by similar problems, declined 18% in 1988. Chrysler Financial Corp., on the other hand, enjoyed a 15% earnings gain.

Still, Ford Credit needs to contain its credit risks and keep its portfolio clean, since it often bundles loans and resells them in the secondary market to raise cash. And even with tougher loan stan- dards in place, credit losses aren't ex- pected to decline until next year.

Meanwhile, a 4.8% drop in its U. S. new-car sales in the first quarter has Ford Motor looking for ways to loosen buyers' purse strings. Already there is evidence that tighter credit screening is costing sales. So Ford Motor may lean on its finance arm to ease up. "We op- erate pretty much independently from that pressure," says Odom. But if car sales continue to slump, that independence will certainly be put to the test.

By David Woodruff in Detroit



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How Fujitsu helps a legendary railroad make history.

The Union Pacific Railroad is not just a company, it's a call to the consciousness of a nation. Created by Abraham Lincoln's signing of the Pacific Railroad Act of 1862, it laid tracks across a wild continent from Omaha, Nebraska to Promontory, Utah, where it met the Central Pacific coming from the sea. A golden spike marked the birth of America's first transcontinental railroad.

Settled the American West

Union Pacific settled the American West, carrying hundreds of thousands of pioneers into the world of wide open spaces. It made history then, and it's *still* making history: today it is one of America's most progressive railroads, with 23,000 miles of track in 20 states, 30,000 employees, and a reputation for far-sighted thinking in every area of its operations—including its remarkable communications network.

Nationwide network

Union Pacific owns a private voice and data communications network, one of the largest in the world. Covering tens of thousands of miles nationwide and functioning as the railroad's central nervous system, it is extremely sophisticated and absolutely crucial to the company's success. Which is

why, when Union Pacific recently decided to upgrade the network, it turned to Fujitsu.

Number one computer maker

Fujitsu is Japan's number one computer maker, and one of the world's top telecommunications makers, with 100,000 employees, annual sales of \$16 billion, and projects completed in a hundred countries. A high-tech giant that's a major force in the global information revolution, Fujitsu gave Union Pacific a multi-nodal integrated voice and data communications system that is the next generation of business telecommunications. The system will boost productivity, upgrade customer service, and help the railroad keep making history—by helping it be what it has always been: a living legend that knows where the future is.



Jim Merrick of Union Pacific talks to Jay Schrimpl of Fujitsu before the Fujitsu F9600 ISDN switching system. Union Pacific recently purchased a number of such systems, the most advanced in the world, to function as node points in its nationwide communications network. For information call Fujitsu Business Communication Systems at 1-800-654-0715.

FUJITSU

The global computer & communications company.

BY GENE G. MARCIAL

DOES PENNZOIL SEE A GUSHER IN KERR-McGEE?

When Pennzoil disclosed in early February that it had acquired an 8% stake in Burlington Resources, several other oil stocks that had been deemed takeover targets tumbled. That list included Kerr-McGee. But Kerr-McGee's shares are now back in the fast lane, up from 38 to 45 since early February. And trading has been unusually heavy.

"There's evidence that a steep, upward trend in money flows is moving into the stock, very similar to patterns of consistent stock accumulation," says Simon Langdon, a strategist at Knight-Ridder TradeCenter. The accumulation has pushed the stock above its resistance level of 44, he says.

New whispers have Pennzoil doing much of the recent buying. One New York money manager who has been buying shares is convinced that Pennzoil has switched its main focus from Burlington Resources to Kerr-McGee. Burlington has sued Pennzoil, claiming it violated securities laws by misstating its intentions. A Kerr-McGee spokesman said he wasn't aware of anything going on except for the earnings report scheduled for release soon.

Some analysts think Kerr-McGee would be a good fit for Pennzoil, and a better deal because of its undervalued assets. Fred Leuffer, a senior analyst at Cyrus J. Lawrence, Morgan Grenfell, puts Kerr-McGee's breakup value at more than \$65 a share.

BIG FINDS. "Kerr-McGee's increased oil-and-gas reserves, higher acreage holdings, and improved outlook for its chemicals and refining and marketing have led us to increase our estimated appraised value from an earlier \$53 a share to \$65 a share," says Leuffer.

Here's his breakdown: proven oil and gas reserves, \$24 a share; probable reserves, \$8.50; land, \$2; chemicals, \$12.10; coal, \$8.50; refining, marketing, and distribution, \$9.60; contract drilling, \$4.90; others, \$3.65; plus net working capital, \$4.75. Subtracting long-term debt of \$12.75 a share leaves \$65.25 a share, or \$3.1 billion, based on 48.3 million shares outstanding. Its current market value is \$2.1 billion.

Leuffer expects Kerr-McGee's production to jump by 40% to 45% by the mid-1990s from 1988 levels. Because

KERR-McGEE STARTS TO PICK UP SPEED



Kerr-McGee has been conservative in adding reserves to the balance sheet, says Leuffer, several large discoveries in the North Sea last year were not recorded on the books. The company's partners, however, did book some reserves from fields in which Kerr-McGee has an interest.

Leuffer has raised his 1989 earnings estimates from \$2.40 a share to \$2.85, vs. last year's \$2.27. He expects 1990 earnings of \$3.30 a share.

A SEMICONDUCTOR SECRET IS OUT

Until recently, Genus was known mainly within the semiconductor business. But more investors are beginning to catch on. Since going public in November at \$5 a share, the stock has shot up to 8%. Although the semiconductor industry has yet to recover fully from its slump, a small band of semiconductor equipment makers, including Genus, are alive and well. The company's earnings jumped from 3¢ a share in 1988's first quarter to 17¢ in the first quarter of 1989, and sales leaped from \$11.8 million to \$18.6 million. For all of 1988, revenues soared 263%, to \$55.2 million, and earnings totaled \$3.5 million, or 50¢, vs. a loss in 1987.

Sam Navarro, managing director of technology research at Ladenburg Thalmann & Co., thinks the good news is just starting to come out. "The technology area will be the next hot arena for takeovers," he says, "and Genus is a vulnerable target." Genus makes thin-film deposition and high-energy ion implantation systems used by semi-

conductor companies to produce advanced integrated circuits.

Genus' tungsten-based chemical vapor deposition (CVD) equipment has 90% of the market, which is growing by 50% a year. Genus' megavolt high-energy ion implantation (HEII) equipment added \$14 million to 1988 sales and is expected to grow by 70% in 1989. These products alone could provide \$200 million in annual revenues in three years, says Navarro.

A fund manager who has been buying shares says Genus stock is worth twice its current price. He feels another semiconductor equipment maker, Novellus Systems, may want to merge with Genus. Novellus is big in CVDs, but not in HEII as Genus is. The Hillmans of Pittsburgh owns about 43% of the company. A Genus spokeswoman says Genus itself wants to make an acquisition.

TOO MUCH AT HALF THE PRICE?

The South's One Price Clothing Stores operate on a simple concept: Every piece of women's apparel in its 167 stores sells for a uniform price of \$6 per item. That's been the case since One Price opened its doors in 1984, and so far the strategy has served the company well. Earnings jumped from \$100,000, or 1¢ a share, in 1984, to \$3.8 million, or 59¢ a share, in 1988. Revenues climbed from \$500,000 to \$63.8 million. The stock, initially offered to the public at \$10 a share in May, 1987, spurred to 23 just before the 1987 crash. It plunged thereafter to 7, but has managed to bounce back to 15, where it is now.

But some One Price watchers believe the stock is now overpriced—and bound to fall back to around 8. Why? One money manager notes that pretax earnings from operations don't justify the steep price-earnings ratio of 25 that the stock now carries. He says that despite a 63% revenue rise in the first quarter, pretax earnings were essentially unchanged—if the loss provision for the disposal of equipment in the 1988 quarter were eliminated. Also same-store sales increased only 1.8% for the quarter. That doesn't look promising, he says. And he's concerned about some selling by insiders. Chairman Henry Jacobs owns 33% of the stock. Eliot Laurence of Wessels, Arnold & Henderson, feels the stock is near its "fair value." But earning growth, he says, "is still on track despite the slump in the industry."

EITHER RAIN, NOR SLEET, OR COMPUTER GLITCHES . . .

Electronic mail is finally poised to deliver

It was a remarkable achievement, even if it did go largely unnoticed. Last month, a computer at Hughes Aircraft Co. in Los Angeles zapped a memo to a computer nearly 2,000 miles away at Boeing Co.—and the age of electronic mail dawned. It wasn't just that the memo took mere seconds to arrive. More impressive was that it crossed previously impenetrable boundaries. With the press of a button, the message left a Hughes IBM computer, was picked up by MCI Mail, transferred to a Telemail, then deposited in a Digital Equipment computer at Boeing. Says Donaghay, manager of Hughes's Customer Services & Support Dept.: "It took us more than a decade to learn that electronic mail can work."

E-mail, or the computer-to-computer exchange of messages, already is a feature of big business. Over a million U.S. managers now rely on it for interoffice correspondence and keeping up with people in the field. And so, electronic mail has failed to meet expectations. The 3 billion messages sent each year, virtually all were on closed networks that couldn't make contact with the outside world. "It's as if we told people you can only call other people who have a black telephone," says Michael Zisman, president of Soft-Switch Inc., an electronic mail software company.

EF. When it darted among four different electronic mail systems, the Hughes-Boeing memo, one of many test messages that have been sent during an Aerospace Industries Assn. (AIA) pilot project, broke this barrier. Walter Ulrich, the office automation partner at Peters & Lybrand, predicts that by the year 2000, some 16 billion messages annually will be sent via E-mail. He puts the number at 60 billion by the year 2000. Link Resources Inc. research analyst Thomas Bosomworth says that E-mail revenues, \$400 million last year, are expected to balloon 90% annually throughout the 1990s.

That will happen, the E-mail industry claims, because electronic mail will join the telephone and newer technologies such as facsimile machines as a key means of communication. That's not great news for overnight-mail deliverers and the U.S. Postal Service. Sitting at a PC or a terminal attached to a mainframe, E-mailers will be able to send notes and perhaps even legal documents

typing a short note on a computer is less trouble and less confrontational than face-to-face conversations, there may be a rash of electronic correspondence from consumers to manufacturers, workers to supervisors, and usually uninvolved citizens to the President or Congress. "E-mail is a great equalizer because it does away with the protocol of telephone calls and visits, and lets everybody communicate on the same level," says Sam Albert, vice-president at market researcher Input and a 30-year veteran of IBM who was involved in its early electronic mail projects.

PLAIN ENVELOPE. Whatever the social impact of E-mail, just the prospect of moving a lot more messages is about to start a free-for-all among the seven market leaders: EasyLink, Telemail, Dialcom, MCI Mail, and AT&T Mail, which offer mailboxes to individuals, and Digital Equipment Corp. and IBM, which dominate the market for private corporate systems (chart, page 138). Telenet Communications Corp., a U.S. Sprint Communications Co. subsidiary, thinks its Telemail service is a key to future growth and has made it a separate profit center. Meanwhile, Western Union Corp., with its telex business shrinking 30% a year, is spending millions to push its EasyLink service. EasyLink not only lets customers send electronic messages in the traditional fashion but also will transmit the message to a fax machine and even send it by messenger if the receiving party has no equipment.

For E-mail providers, all this comes as a relief after a decade of lean years. In the early 1980s, industry analysts say, Western Union spent about \$100 million in a single year to promote its E-mail service and reaped only about \$20 million in new revenues. Notes Ulrich: "[Suppliers] were doing more marketing than they had to do to support potential volumes, and profitability suffered."

If those days are really past, it's because of a new communications standard called X-dot 400 (X.400). Adopted in 1984 by the International Telephone & Telegraph Consultative Committee after five years of meetings, X.400 is a series of rules detailing the technical design of electronic mail hardware and software. "Essentially, X.400 wraps a plain white envelope around an E-mail message that all electronic mail systems can read," says David Lonsdale, director of applied communications systems at McDonnell



just by typing in the name of the person they want to reach.

Some analysts view that as an incremental change. "For most of us, I don't see it as much more than a way to avoid playing telephone tag," says Kenneth G. Bosomworth, president of market researcher International Resource Development Inc. But others see E-mail as a much more important tool for extending the reach of communications. Because

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you have to be taken
for another ride?**



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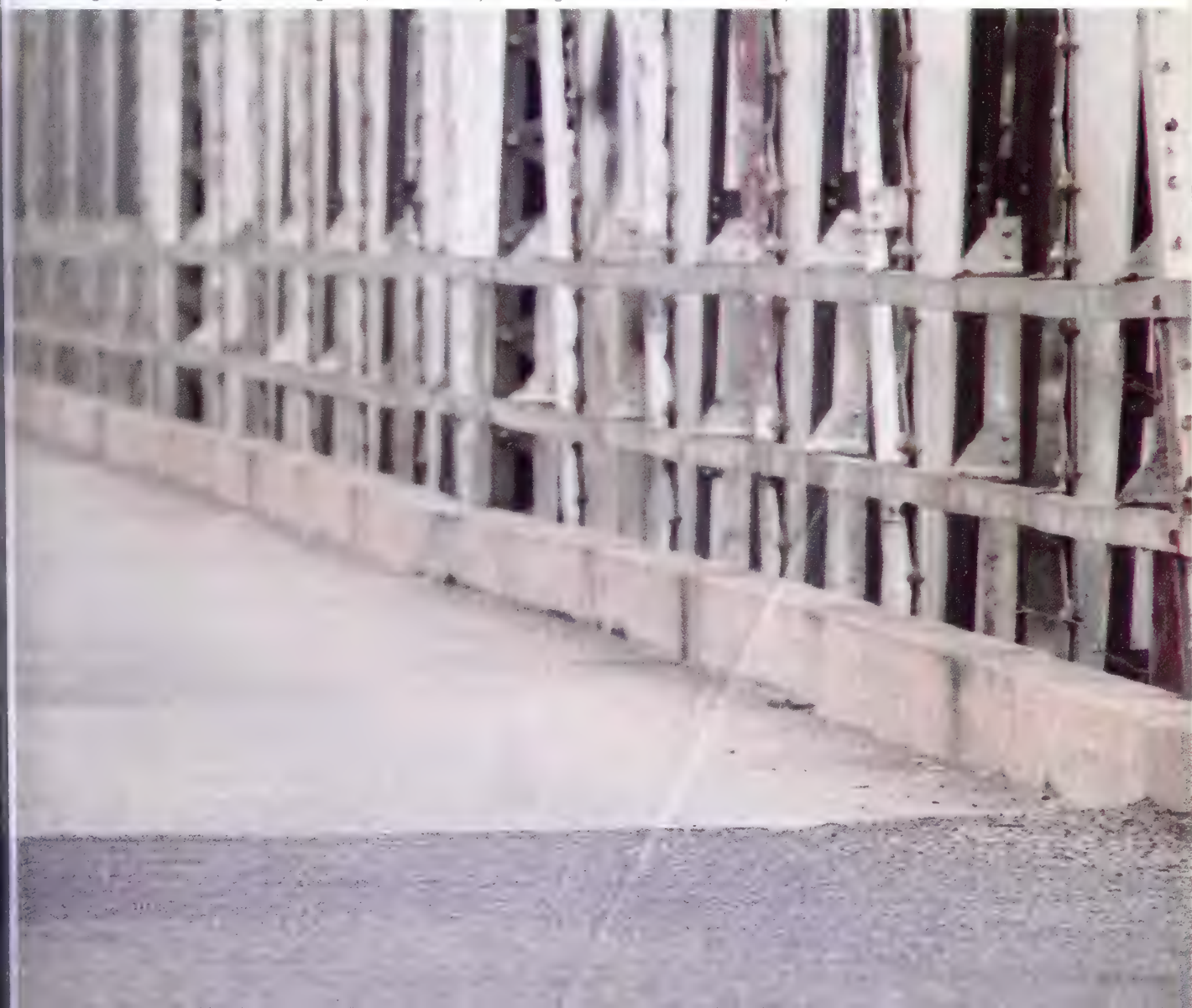
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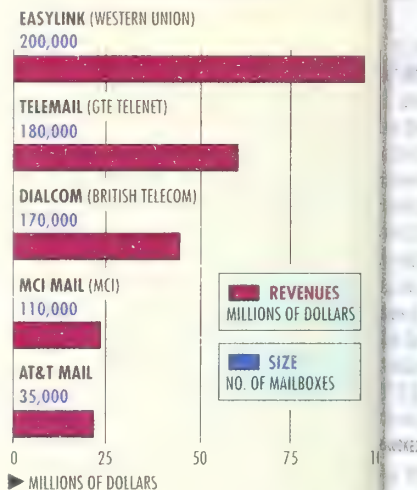


*From Database Magazine

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WHO'S WHO IN ELECTRONIC MAIL

PUBLIC NETWORKS



CORPORATE SYSTEMS

ALL-IN-ONE (DIGITAL EQUIPMENT)	1.7 MILLION	NOT AVAILABLE
PROFS (IBM)	1.1 MILLION	NOT AVAILABLE

DATA: LINK RESOURCES

White, one of the developers of X.400 and now a principal at Rapport Communications Inc., an electronic mail consulting firm in Palo Alto, Calif. But the public networks were forced into a compromise by powerful customers who grew tired of waiting for open systems. **JUNK MAIL.** Last August, the federal government declared that all communications services it purchases must use X.400 in their design. In December, 50 members of the AIA followed the government's lead. The aerospace companies, which send about 800,000 messages a day via computer, said they would stop doing business with public networks that didn't adopt the electronic mail standard. That did the trick. Digital Equipment already has agreed to join

tronic mail systems with MCI Mail. is doing the same with MCI and at one other public network provider.

AT&T Mail and Dialcom, which are designing a new federal telecommunications system, have linked their networks.

One of this means that E-mail is free. The carriers still must develop a directory, X.500, with the names of electronic mailers. When the directory is completed, by 1993, E-mailers will only enter the name of the person they're addressing on a computer, and the E-mail system will automatically deliver the message. This raises questions prompted by the local phone book. For example, can customers weed out junk mail? Or how do public figures hate mail from crowding their inboxes? "It's clear that even with electronic mail, some people are going to have an unlisted number," says Victor S. Atman, a principal consultant at the firm.

The fear of too many messages won't hurt E-mail, pricing may—especially against competing technologies such as faxes. Electronic mail messages cost about \$1 per page to send, and although one startup, Faxcom Systems Inc., of Rockville, Md., is setting up a fax network that will cost subscribers about 50¢ per page for each message delivered, E-mail may be able to offset its disadvantages vs. fax with business it picks up from the overnight carriers. According to analysts, letters make up as much as 10% of all express-mail deliveries, and E-mail could win some of this business.

LOCKED. Perhaps the biggest remaining impediment to E-mail is the small number of local area networks (LANs) that are linking computers in major corporations. There are 600,000 LANs in the U.S., nearly 10% of them with electronic mail systems. But because E-mail hasn't been adopted by any major manufacturer, hardly anyone on a LAN can communicate externally by E-mail. "Customers on these networks are locked," says Richard A. Kozak, General Aviation's vice-president in charge of electronic messaging. They may not be long, however. A new group, called the Applications Program Interface Committee, has been formed to develop electronic communications standards that can be used on local area networks. These standards are expected to be ready sometime next year.

Compared with other hot high-tech products, electronic mail has been a slow starter. Hamstrung by a lack of standards, it has taken a decade to catch on. With its lines of communications opening, electronic mail finally may be able to deliver on its promise.

Jeffrey Rothfeder, with John J. Keller and Susan Gelfond in New York

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SMART FACTORIES: AMERICA'S TURN?

A FEW ADVANCED PLANTS NOW—A COMPETITIVE ARSENAL SOON

A decade ago, the Factory of the Future seemed to be just around the corner. Consultants painted rosy pictures of designs for new products electronically zipping from computer terminals to machines on the factory floor. Robots would perform repetitive, menial work. Everything would be so automated that production lines could switch on a moment's notice from making two-slice toasters to three-speed fans. Productivity and quality would soar, products would get to market in a flash, and costs would plummet.

It didn't happen that way. Many companies tossed millions of dollars' worth of fancy equipment into their factories and wound up with little to show for it. A hard lesson was learned: All those high-tech gadgets were just too dumb to cut it in an environment plagued by constant change. Even on mass-production lines that churn out the same thing day in and day out, there are myriad varia-

tions in raw materials as well as interruptions such as machinery breakdowns.

Out of those disappointments, however, a new vision of tomorrow's manufacturing enterprise is emerging. This time, automation won't just get slapped on top of the same old structure, which simply produces more bad results quicker. Instead, reorganization will take place from the ground up. The goal isn't just to work faster, but smarter—with the help of lots of artificial intelligence (AI) buried in a new generation of manufacturing systems.

NO PAPER. Right now, the aerospace industry is leading the charge in manufacturing AI, partly as a result of long-standing Air Force programs and subsidies that encourage contractors to modernize production methods. But a handful of other companies—including Xerox, Westinghouse, Texas Instruments, Hewlett-Packard, and Emhart—are pushing toward a new nirvana called

"computer-integrated enterprise."

The Japanese may outclass the U.S. in manufacturing skills, but these few ultra-advanced plants are so far an all-American thrust. If more U.S. companies pick up on the idea quickly enough, it could be a potent competitive weapon. But several vendors warn that Japanese manufacturers have been evaluating advanced systems, and sales there are starting to climb.

Perhaps the most dramatic evidence of what's in store rolled out of a hangar in Palmdale, Calif., last Nov. 22. The B-2 Stealth bomber is one of the most complex products ever made. And it certainly takes the prize as the most complex mechanical system to be conceived, engineered, and produced totally by computers, without a shred of paper. The computer model of the B-2 is so intricate and precise that Northrop Corp. didn't bother building a mock-up, another first for the Los Angeles company.

THE CRUCIAL STEPS TO AUTOMATION

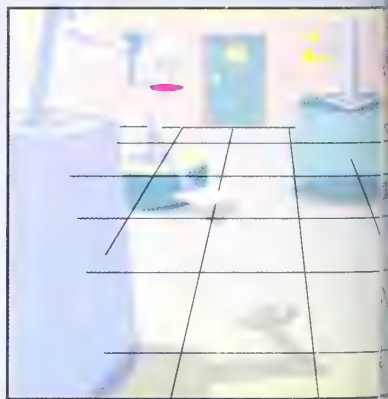
Many U.S. companies tried to hopscotch their way to computer-integrated manufacturing. Most stumbled, but that hasn't deterred some from trying again. Two new technologies, artificial intelligence and object-oriented programming, could lift U.S. competitiveness. But Japanese noses are catching the scent, too.

1 Simplify and reorganize the shop floor for optimum efficiency—with no automation, or at least no new automation. Only then will further steps yield maximum benefits.



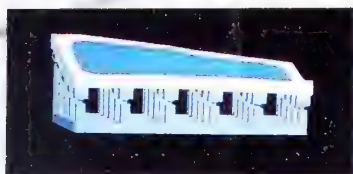
STATUS Often poorly implemented in the U.S. Done widely and rigorously in Japan. Western Europe lags behind both.

2 Create "islands of automation" with robots, flexible manufacturing cells, computer controls, and other advanced shop floor systems.



STATUS Widely implemented in both the U.S. and Japan, but much more effectively in Japan. Just beginning in Europe.

DATA: CARNEGIE MELLON UNIVERSITY, CARNEGIE GROUP INC., B-7



PRESTO, A DESIGN

Molds for parts of the Osprey helicopter can be engineered at the push of a button—the data already “captured” by computer



they felt it would impede them.” At first, he admits, this raised hackles among the design engineers. They were accustomed to dictating to the factory. “But when the designers saw the types of changes that the downstream folks brought in, they realized it really avoided a lot of engineering change orders. Now it’s the accepted practice.”

COLD EYE. At Lockheed Corp., the Aeronautical Systems Group has developed an integrated metal-bending facility called Calfab, for computer-aided layout and fabrication. It has slashed the time for designing and manufacturing sheet-metal parts by 96%, from 52 days to only 2. Project manager Tony Soria credits organizational changes for 80% of that improvement. For instance, the various machines involved were rearranged so that the metal panels travel only 150 feet, vs. 2,500 feet before.

But what keeps the Burbank (Calif.) operation running smoothly is AI. Expert systems, which are computer programs that mimic the reasoning of a human expert, oversee everything from design to inspection. Lockheed hopes Calfab will help it land the contract for the proposed Advanced Tactical Fighter.

Similarly, Bell Textron Inc.’s new V-22 Osprey tilt-rotor helicopter, which made its maiden flight just weeks ago, was designed with a “smart” computer-aided engineering (CAE) system from Icad Inc.,

such radical departures from conventional might seem risky, but they paid off.

All but 3% of the B-2’s parts (the total is classified, but it’s probably close to 30,000) fit perfectly the first time. The best that Northrop had ever achieved before was 50%, says Jeffrey M. Mirisch, manager of CAD/CAM development for the B-2. Moreover, compared to the company’s track record, “there was a 6-to-1 reduction in engineering changes” during the design’s evolution and those that were made were implemented five times as fast. The computer

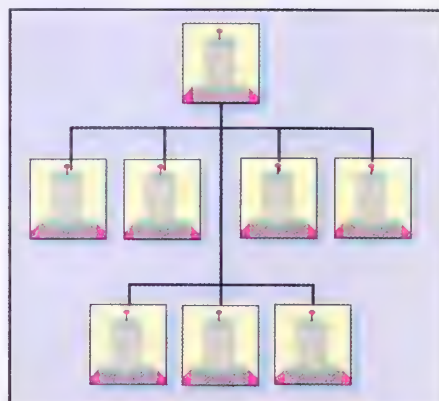
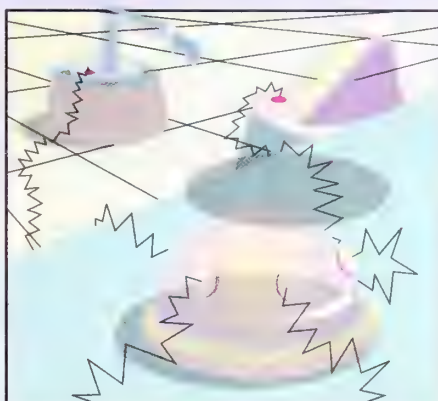
instructions to make the tooling for fabricating the B-2’s sleek skin and internal components were written 40% faster. Some were even produced directly by the computer model.

Those engineering feats are matched by a sweeping organizational change: Manufacturing got veto authority over the design. “Early in the program,” says Mirisch, “we determined it was absolutely necessary for the downstream disciplines, especially manufacturing, to have access to the engineering information before it was released—and veto it if

the islands of automation to each other and to computer-aided design through a shared data base, either hierarchical or object-oriented.

4 Use artificial intelligence (AI) and object-oriented software to integrate some operations with CAD and to automate such complex steps as production scheduling and diagnostics.

5 Extend AI and object-oriented techniques to all decision-making steps, from product planning to customer service. This is the “computer-integrated enterprise.”



Adopted by many major U.S. manufacturers and being implemented at a growing number of smaller companies. Japan is slightly ahead. Europe is far behind.

STATUS Now the cutting edge among progressive U.S. companies. Rare in Japan, but done more effectively. Almost nonexistent in Europe.

STATUS Under way at only a couple of U.S. companies. So far not implemented in Japan, but many Japanese companies could do so rapidly. Nonexistent in Europe.

Special Report

in Cambridge, Mass. The copter probably won't go into production (it was cut from the budget), but if it did, Bell would spend \$1 billion on molds and tooling for the all-composites airframe and rotors. Engineering those molds would normally take four months or so each. But the data needed for the tooling were captured during the design phase, a process that manufacturing types call concurrent engineering. Now, about all that's required to get a tool design is to push a button, and the CAE system will automatically generate the tooling. In fact, the Icad system has even been programmed to know the capabilities of Bell's individual plants, so it can adjust the tool designs according to where a part will be produced.

For the effects on quality that AI techniques can produce, look to the new \$17 million flexible manufacturing system that Westinghouse Electric Corp. is installing in General Dynamics Corp.'s Fort Worth (Tex.) plant. By embedding the expertise of a master machinist in a system that oversees this cluster of machine tools and robots, the operation has never scored less than 100% quality.

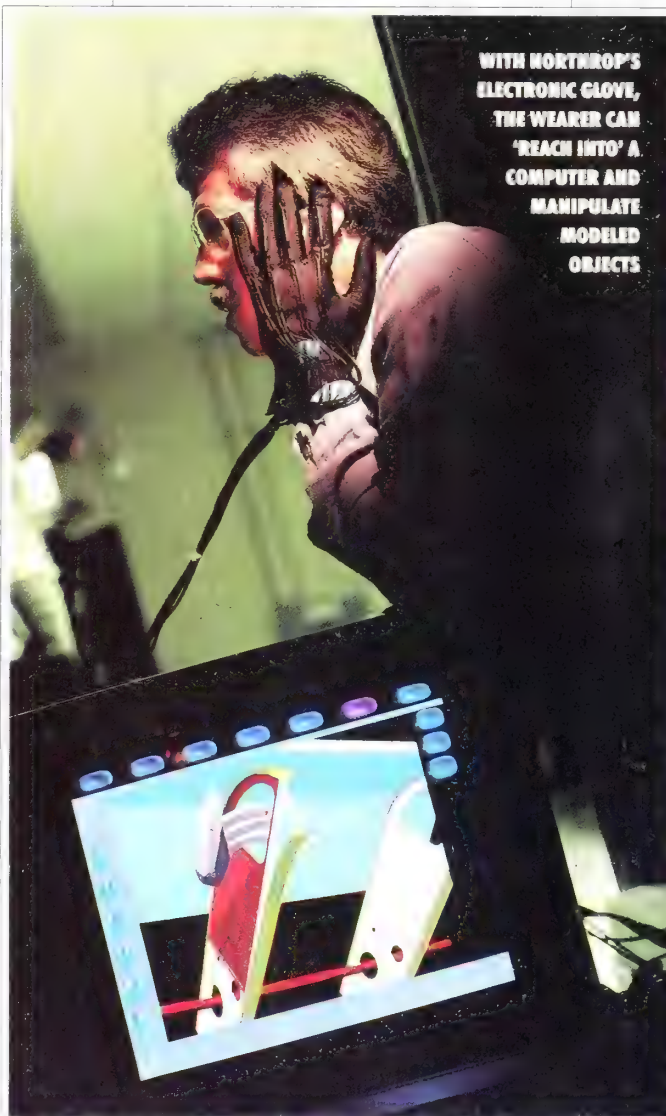
Boeing is readying its newest software expert to take over production scheduling at the Boeing Helicopters composites job shop in Philadelphia. Based on work by Pittsburgh's Carnegie Group Inc., a spinoff from Carnegie Mellon University that specializes in manufacturing AI, the program will regulate production to smooth the flow of parts into the autoclave, where they are baked until hard. "They require different temperatures and different periods of time," says George Roberts, general manager of Boeing Computer Service's Advanced Technology Center. "You have to get them batched out so they arrive at the right time." This program has been under development for three years and is still more than a year from completion. "Scheduling is a bear," notes Roberts.

As a group, the aerospace crowd may be at the forefront of manufacturing AI, but everyone seems to agree that one company has climbed head and shoulders above all others: Digital Equipment Corp. DEC is one of only a handful of companies worldwide with a foothold on

the top rung of the automation ladder.

Currently, DEC's savings from this technology are running at an annual clip of \$135 million—not a bad return on an investment of \$30 million this year. The savings stem from reduced inventories, higher productivity, and faster cycle times for billing and distributing products. And the company recently launched a five-year project to lift yearly savings to more than \$400 million, says

When an order is placed, Xcon check on parts availability and advises the customer on expected delivery. Then it dispatches orders for all of the necessary elements to DEC's various factories. The company figures this pair of programs accounts for the bulk of savings. "You don't have a \$4 million system sitting around because one part is missing," explains Jack Rahaim, AI marketing manager.



**WITH NORTROP'S
ELECTRONIC GLOVE,
THE WEARER CAN
'REACH INTO' A
COMPUTER AND
MANIPULATE
MODELED
OBJECTS**

WHAT IF? A fairly new expert system, dubbed MOC, for Manufacturing Operations Consultant, keeps tabs on DEC's strategic position. If Xcon reports a sudden shift in demand, MOC takes only 15 minutes to lay out how that change will affect production, inventories, and gross margins—and it advises which factories need adjusted production plans. The system also enables managers to play what-if games. "It shows us how decisions at the strategic level will play out on the shop floor," notes O'Connor. "If you have an early indication of new trends, you can adjust quickly." MOC now covers DEC's top 80 products, but the program is being expanded to include materials and parts orders.

The extent to which DEC has integrated expert systems into its operation is still a dream for other manufacturers, but even piecemeal efforts can yield handsome rewards. According to a study by Edward A. Feigenbaum, professor of computer science at Stanford University, specific applications of expert systems generally rack up gains of at least 10 times, and speedups of 20, 30, or 40 were common. In product design and engineering, hundredfold productivity jumps are not too unusual.

Dennis E. O'Connor, head of DEC's AI Technology Center. In addition, DEC now pulls in well over \$80 million from selling its AI software to other companies, with half of the revenues coming from the manufacturing sector.

DEC began using its first factory expert system, Xcon, in 1979 and added Xsel in 1983. Written by AI gurus at Carnegie Mellon, Xsel analyzes a customer's stated computer-power needs and suggests how much memory and how many hard-disk drives, terminals, and other components are required.

That explains why manufacturing is the hottest growth market for expert systems and already accounts for 60% of all expert systems deployed, reports Gartner Group Inc., a Stamford (Conn.) market researcher. At Westinghouse's turbine blade plant in Winston-Salem, N.C., an expert system poring over blueprints relayed electronically from the company's Orlando engineering office and automatically generates the instructions for producing the design. Previously, when engineers had to do this by eyeballing drawings, getting design into production took about

75. Now the lag has been chopped
6, to one day.

Most factory expert systems are
tching over product inspection and
ting operations. For example, Hew-
-Packard Co. makes disk drives in
se, Idaho, and for a final check socks
m with equatorial heat and humidity
an environmental testing chamber.
y drive that flunks this test after
sing all the others almost always has
ie obscure problem. Tracking it down
d to take anywhere from an after-
n to three days. Last year, HP turned
task over to an expert system. It
s the job in 30 seconds, with 99%-plus
uracy, and has saved more than \$1
ion.

Because the decision-making rules for
lity tests are generally simple and
l known, an expert system can be

created with relative ease by shop-floor
personnel using an inexpensive "shell,"
or development program, that runs on a
personal computer. Several such shells
are available for \$500 or less. Despite
their low cost, these programs aren't
toys. A Detroit auto maker used one
such expert system to track down a re-
curring problem that had gone undetected
by its normal quality checks.

LOCKED IN. But attention is rapidly shifting
to the other end of the manufacturing
spectrum—design. Historically, design-
ers created products without
knowing how easy they would be to
manufacture, notes Rodney MacDow, di-
rector of computer-integrated manufactur-
ing (CIM) at Prime Computer Inc.,
which now owns computer-aided design
(CAD) pioneer Computervision Corp. Com-
panies are pushing to change that be-

cause 70% to 90% of a product's cost is
locked in during the design phase. More-
over, changing a design after it reaches
the shop floor costs 10 times as much as
catching it on the drawing board—and
100 times as much if the change is made
midway through the production cycle.

To guard against that while develop-
ing its latest computerized cash register,
NCR Corp. used a design-for-manufactur-
ability (DFM) program from Boothroyd
Dewhurst Inc. in tandem with a comput-
er-aided engineering package from
Structural Dynamics Research Corp. Re-
sult: The point-of-sale terminal was in-
troduced a mere two years after design
began, and it can be assembled in just
two minutes—blindfolded (page 150).

One of the most ambitious efforts to
revamp manufacturing is under way at
Northrop, which has embarked on a ma-

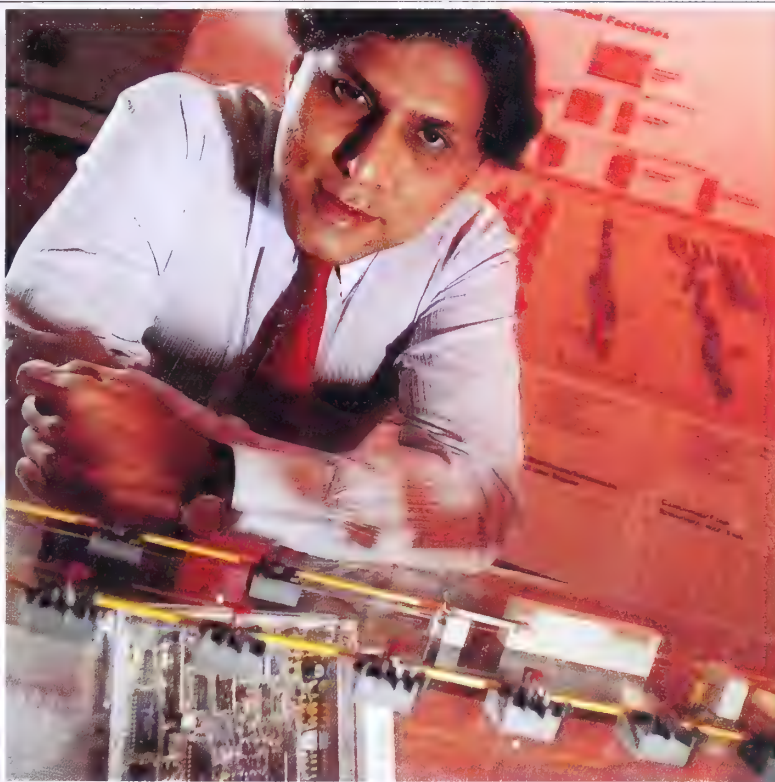
A FACTORY THAT PRACTICALLY RUNS ITSELF

It could be the
world's most highly
integrated factory.
Omesh Wadhvani
says so, at least. His
Pittsburgh-based com-
pany won the job of
piecing together all the
computerized equip-
ment in Ford Motor
Co.'s new Lansdale
plant, which will
turn out printed circuit
boards that control car
engines. Scheduled to
open next January, the
factory will be stuffed
with close to \$100 mil-
lion worth of the
most automated sys-
tems. It's designed to
turn out 3 million
boards a year, in lot
sizes as small as one.

"In terms of tight-
ness of integration,"
says the chairman of
Cimflex Teknowledge
Corp., "it's ahead of
world class." In fact,
he confides, it wouldn't

take much to make it the smartest
plant in the world, able to do assembly
around the unattended overnight shift. Ja-
pan doesn't have such a factory, he
asserts, despite a lot of publicity that
may imply otherwise. The Japanese
plants that operate "lights-out" shifts
do machining, not assembly—and
even then the machine tools are slowed
down considerably to help assure that
nothing goes wrong.

Ford plant manager George A. Lutz



WADHWANI: NEXT, "WE'LL LINK THE FACTORY TO CUSTOMER SERVICE"

says that it's rather blue-sky to talk
about any plant doing unattended as-
sembly operations. But, he agrees, his
facility will be top-flight. "It will be
better than anything I've ever seen in
Japan, and at least as good as GM's
best—which I haven't seen."

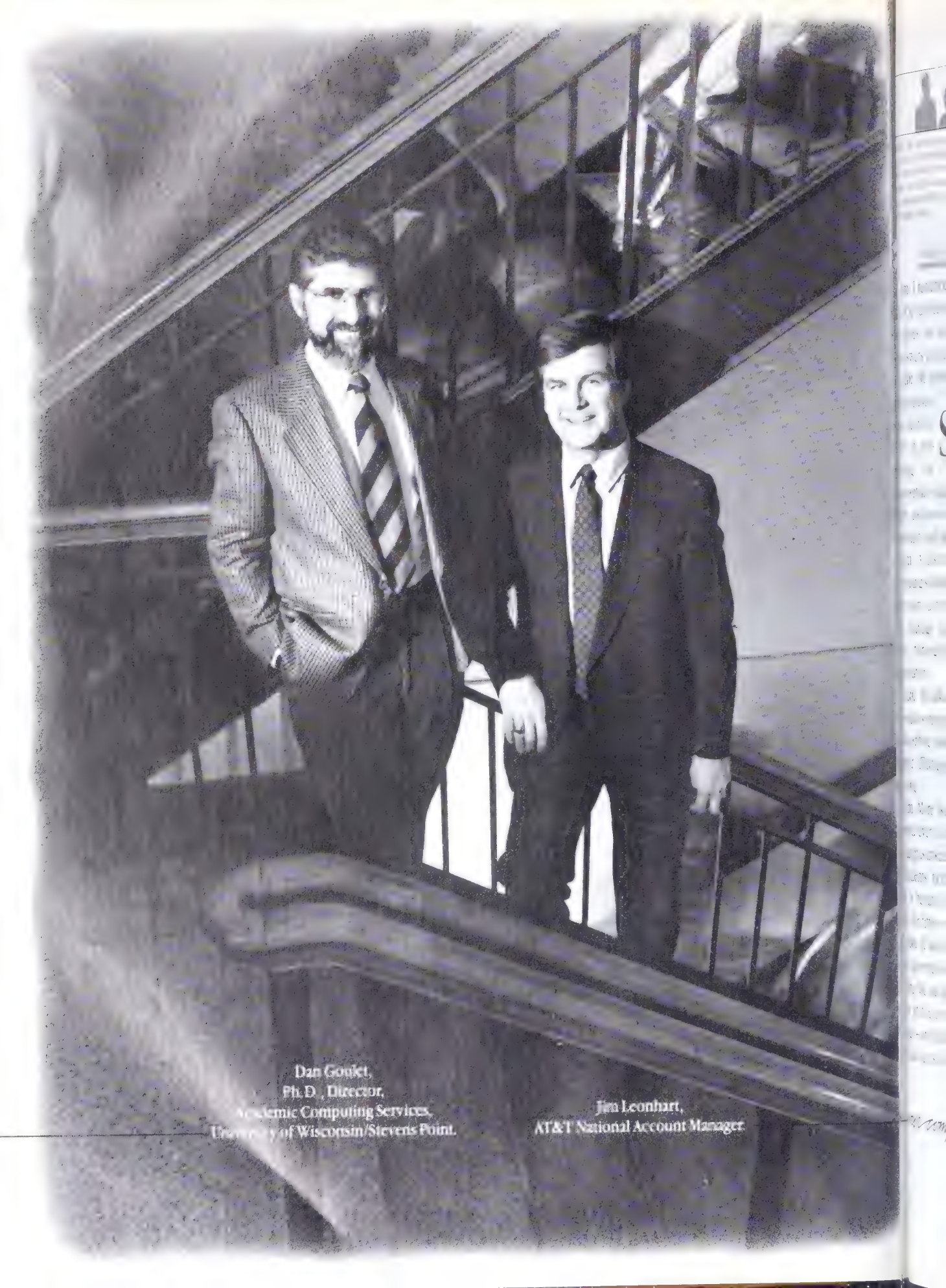
Wadhvani's fancies shouldn't be dis-
missed lightly. His company has pur-
chased Teknowledge Inc., a pioneer in
artificial intelligence, and Wadhvani
clearly wants to expand his substantial

factory AI offerings.
"Until now, we've been
focused on the shop
floor. Now, we're mi-
grating up, into design
for manufacturability
and engineering analy-
sis, to manufacturing
planning and schedul-
ing. Next, we will
migrate downstream,
into linking the factory
to customer service."

SLO-BOTS. Initially,
Wadhvani was inter-
ested in industrial ro-
bots. But soon after he
moved startup Ameri-
can Robot Corp. from
Winston-Salem, N. C.,
to Pittsburgh in 1982,
the robot market came
unglued. He quickly
shifted into systems in-
tegration and AI,
changing the compa-
ny's name to American
Cimflex.

In late 1986, Paine-
Webber R&D Partners
Ltd. decided to help

fund Cimflex' factory-AI program with
\$7 million, later upping it to \$10 mil-
lion. The company assembled one of
the country's larger AI staffs—two
dozen expert-system software engi-
neers. Its first product debuted in ear-
ly 1988: an expert system for trouble-
shooting factory machines. With
Teknowledge's brains behind it, Cim-
flex Teknowledge—its newest name—
just might have the resources to pull
off unattended assembly.

A black and white photograph of two men standing on a wide staircase with a wooden handrail. The man on the left is wearing a pinstriped suit and a striped tie, and has a beard and glasses. The man on the right is wearing a dark suit and a patterned tie. They are both smiling at the camera. The background shows the architectural details of the staircase and building.

Dan Goulet,
Ph.D., Director,
Academic Computing Services,
University of Wisconsin/Stevens Point.

Jim Leonhart,
AT&T National Account Manager.



ently, an information management revolution
urred at the University of Wisconsin-Stevens
nt. Dan Goulet from the University and Jim
nhart of AT&T—campus radicals of a different
d—explain how they were able to realize a bold
complex vision.

FEBRUARY 22, 1989

Jim: I remember the first day we
t. You had been around the block a
v times, but weren't getting
: answers you needed.

Dan: We wanted to create a
ique educa-
n environ-
nt: a free-
wing on-
e computer campus. We had a
ion, and we were looking for
neone to help build it.

Jim: A distributed networked
nputing solution, that's what we'd
l it now: a way to process, move
l manage information effec-
ely, throughout a widespread
ganization.

Dan: We talked to many comput-
venders before you. We got tired
describing what we needed, so we
w it. That graphic was about 13
' long.

Jim: More like twenty. The chart
owed every information resource
campus linked together, accessible
students, faculty, and administra-
1. It became the wallpaper in my
ce for fifteen months.

Dan: It was like a blueprint for a
a superhighway.

Jim: We put our ISN wide-area net-
rk at the center—like an inter-
nge—and built fiber and twisted-
r data lanes to applications running

on AT&T 3B2s, DEC, UNISYS and
other hosts located in all the depart-
ments. We put on- and off-ramps in
strategic locations: StarLAN networks
that gave access to the highway from
workstations.

Dan: We designed everything
from the user perspective. The more
technically remarkable the system
became, the harder we worked to
make it approachable.

These men started a revolution on campus.

Jim: Easy for novices, powerful
enough for programming students.

Dan: We developed a menu-
driven user interface that is consistent
and clear. Students and faculty can
select applications like checking spell-
ing, transmitting course grades, even
browsing through the on-line card cat-
alog of 1.5 million books at the Univer-
sity of Wisconsin-Madison. We wanted
desktop power and access, but we
wanted to process information where
it made the most sense.

Jim: Thinking back, we realized
early that the complexity of your
vision precluded a single-system
focus. You needed open systems.

Dan: You were really the only
ones that understood this point. Open
systems allow us to use off-the-shelf
components; vendors have to bid
against each other to get our business.
Open systems are the secret.

Jim: It's mind-boggling how much
computer power is out there. We
wanted to harness it all, yet give a
piece to every individual.

Dan: A truly distributed network,
one we don't think we'll ever outgrow.
We've added 300 WGS workstations
in the last five months.

Jim: Dan, where in the world is
that wallpaper today?

Dan: We had it bronzed. Today,
so many colleges and businesses
really need a similar solution.
That's probably why we've had
so many visits from
them lately.

Jim: Little
did we know
back then, when we first met.

Dan: Oh, something tells
me you had a hint.

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together. The AT&T Information Systems
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way to all computer resources.

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demic Computing by the Board of Re-
gents for the entire University of Wis-
consin system. The majority of the 9000
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Special Report

major effort to tie all of the disparate computer systems in a manufacturing company into one seamless whole. If Northrop is successful, the results will be available to other American companies. That is part of the deal with the Air Force, which is funding 80% of the \$19 million, 40-month project to develop the Automated Aircraft Assembly Plant (AAAP).

called objects, that describe various attributes of a particular thing, such as a round hole.

That can offer striking benefits to the designers of conventional CAD systems. They are grounded in geometry. They create three-dimensional designs that are defined in terms of lines, arcs, and angles. But this information is useless to the manufacturing engineers. Their com-

partments, such as the size and type of bolt that purchasing should buy to fit that hole.

While OOPS-based programs do have to be expert systems, the knowledge-processing capabilities of object-oriented methods make them ideal for the purpose. "Because this approach is inherently suited to representing things rather than numbers, it is more accommodating to people," says Robert E. Joy, AAAP director at Northrop. That's invaluable when developing expert systems, he adds, "because it takes an incredible amount of work to stuff a person into a box."

Combining object-oriented methods and expert-system techniques can yield powerful design systems. If the database includes objects that describe the various machine tools on the factory floor, for example, then such a system can "know" what is or is not easily producible. An expert system could then keep a watchful eye on an evolving design and warn the designer when something might cause production snags. "Putting the manufacturing constraints in the CAD system means you could design for manufacturing, tighten the loop between design and production and drastically shorten the time you need to get products to market," notes Samarjit Marwaha, a senior consultant at Arthur D. Little Inc.'s Center for Applied AI.

HELPING HAND. Northrop is even working on a way to reach into the computer screen and, in effect, grab a part, manipulate it just as if it were outside the terminal. The basic technology was developed by Simgraphics Engineering Corp. in Pasadena, Calif., using object-oriented programming. It works with an electronic glove that broadcasts its position in 3-D space. A receiver relays the information to the computer, which creates an image of a hand combined with the computer-modeled parts. "With this," says Northrop's Joy, "I can assemble [simulated] components and guarantee that they will fit together properly."

With the AAAP project, Northrop believes it is developing the technology that will see it through the 1990s. Marwaha is clearly excited by the prospect for his company. And thanks to an open-house attitude, he is confident that Northrop serves as "just a large example of what's going on everywhere." If he's right, the Factory of the Future may finally fulfill those long-held expectations.

By Otis Port in New York, with Zach Shiller in Cleveland, Gregory L. Miles in Pittsburgh, Amy Schulman in Boston, and bureau reports



The mission of that project is to develop software methods for integrating the data bases now scattered around most companies—one for design, another for manufacturing, and still others for purchasing, warehousing, distribution, and sales. Each speaks a different digital tongue, which makes sharing data difficult at best. As a result, if the sales department accepts a big order for rush delivery, it can be days before that information shows up in the factory computer. Then the manufacturing department has to scramble to revamp production schedules.

LANGUAGE BARRIER. The lack of a way to share computer data has been perhaps the single biggest roadblock to CIM. "The people in the Bible couldn't possibly have conceived of the Tower of Babel that we have now," says Carol Weismann, partner at AIM Consulting & Publications Inc. in Natick, Mass.

To solve that problem, Northrop is combining artificial intelligence with object-oriented programming systems, a mouthful commonly shortened to OOPS. Unlike conventional computer languages, which were designed to deal primarily with numbers and mathematical procedures, OOPS software is equally at home with things and concepts—processing knowledge instead of just crunching numbers. With OOPS, software is composed of independent modules,

puters need data about real-world things like blocks, cylinders, and holes. So the latest generation of object-oriented systems enables a designer to build his computer model with features that are meaningful to manufacturing.

The power of OOPS methods doesn't stop there. Each object is coupled to actions that are associated with that object. For example, a round-hole-object implies drilling, so inserting such a hole in a block of aluminum would automati-

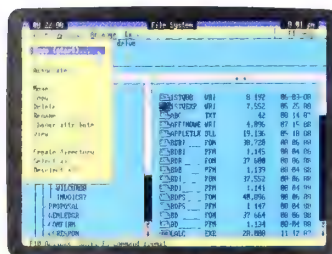
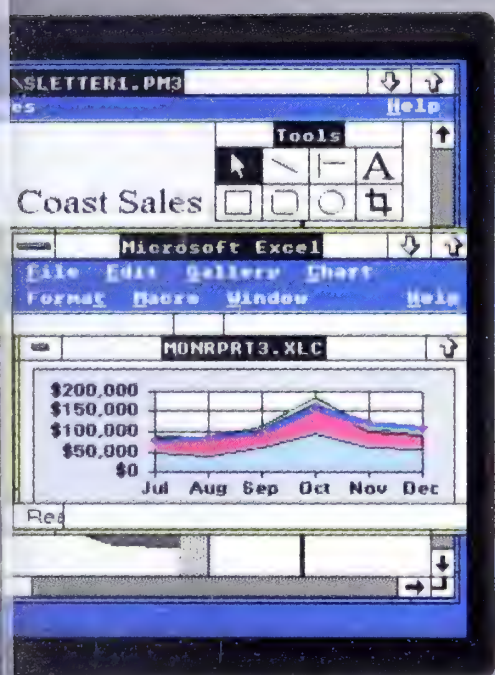
Expert systems 'watch' as designs progress and warn engineers of looming problems

cally tell the factory computer to route that part to a drill press.

In addition, an object in one part of an OOPS program can "point" to other objects in some other part of the database. A hole, for example, can have links to the metallurgical properties of different metals and alloys. With these data, the factory computer could figure out what type of drill to use and how fast that drill should turn. Similar pointers could flag information for other de-

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THE BEST-ENGINEERED PART IS NO PART AT ALL

From assembly to accounting, a simple design draws cheers

Putting together NCR Corp.'s new 2760 electronic cash register is a snap. In fact, William R. Sprague can do it in less than two minutes—blindfolded. To get that kind of easy assembly, Sprague, a senior manufacturing engineer at NCR, insisted that the point-of-sale terminal be designed so that its parts fit together with no screws or bolts.

The entire terminal consists of just 15 vendor-produced components. That's 85% fewer parts, from 65% fewer suppliers, than in the company's previous low-end model, the 2160. And the terminal takes only 25% as much time to assemble. Installation and maintenance are also a breeze, says Sprague. "The simplicity flows through to all of the downstream activities, including field service."

The new NCR product is one of the best examples to date of the payoffs possible from a new engineering approach called "design for manufacturability," mercifully shortened to DFM. Other DFM enthusiasts include Ford, General Motors, IBM, Motorola, Perkin-Elmer, and Whirlpool. Since 1981, General Electric Co. has used DFM in more than 100 development programs, from major appliances to gearboxes for jet engines. GE figures that the concept has netted \$200 million in benefits, either from cost savings or increased market shares.

NUTS TO SCREWS. One U.S. champion of DFM is Geoffrey Boothroyd, a professor of industrial and manufacturing engineering at the University of Rhode Island and the co-founder of Boothroyd Dewhurst Inc. This tiny Wakefield (R.I.) company has developed several computer programs that analyze designs for ease of manufacturing.

The biggest gains, notes Boothroyd, come from eliminating screws and other fasteners. On a supplier's invoice, screws and bolts may run mere pennies apiece, and collectively they account for only about 5% of a typical product's bill of materials. But tack on all of the asso-

ciated costs, such as the time needed to align components while screws are inserted and tightened, and the price of using those mundane parts can pile up to 75% of total assembly costs. "Fasteners should be the first thing to design out of a product," he says.

Had screws been included in the design of NCR's 2760, calculates Sprague, the total cost over the lifetime of the

ing the little details. The product was formally introduced last January, just 2 months after development began. Design was a paperless, interdepartmental effort from the very start. The product remained a computer model until all members of the team—from design engineering, manufacturing, purchasing, customer service, and key suppliers—were satisfied.

That way, the printed-circuit boards, the molds for its plastic housing, and other elements could all be developed simultaneously. This eliminated the usual lag after designers throw a new product "over the wall" to manufacturing, which then must figure out how to make it. "Breaking down the walls between design and manufacturing to facilitate simultaneous engineering," Sprague declares, "was the real breakthrough."

The design process began with a mechanical computer-aided engineering program that allowed the team to fashion three-dimensional models of each part on a computer screen. The software also analyzed the overall product and its various elements for performance and durability. Then the simulated components were assembled on a computer workstation's screen to assure that they would fit together properly. As the design evolved, it was checked periodically with Boothroyd Dewhurst's DFM software. This prompted several changes that trimmed the parts count from an initial 23 to the final 15.

NO MOCK-UP. After everyone on the team gave their thumbs-up, the data for the parts were electronically transferred directly into computer-aided manufacturing systems at the various suppliers. The NCR designers were so confident everything would work as intended that they didn't bother making a mock-up.

DFM can be a powerful weapon against foreign competition. Several years ago, IBM used Boothroyd Dewhurst's software to analyze dot-matrix printers it was sourcing from Japan—and found it could do substantially better.

Its Proprietary has 65% fewer parts and slashed assembly time by 90%. "Almost anything made in Japan," insists Professor Boothroyd, "can be improved upon with DFM—often impressively."

By Otis Port in New York



model would have been \$12,500—per screw. "The huge impact of little things like screws, primarily on overhead costs, just gets lost," he says. That's understandable, he admits, because for new-product development projects "the overriding factor is hitting the market window. It's better to be on time and over budget than on budget but late."

But NCR got its simplified terminal to market in record time without overlook-

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ALLOCATING YOUR ASSETS: YOU MAY NOT NEED A PRO

Asset allocation sounds so effortless and fool-proof. All you do is put your money in a special kind of mutual fund. Then the fund manager figures out the best way to divide it up between stocks, bonds, money-market instruments, and hard assets. You're protected, the reasoning goes, because if one kind of asset does poorly, another will do well. It's really no different from the familiar proverb: Don't put all your eggs in one basket.

Sound as the concept is, it isn't exactly fail-safe. While some of the funds came through the stock market crash with flying colors, their records since have been uneven. So far this year, total returns (price change plus income) averaged 5.95% vs. 12.16% for the S&P 500.

But it's not altogether fair to expect asset-allocation funds to perform as well as an investment in equities alone. The funds are not designed to earn the highest returns; they can't, because they hedge against catastrophic risk by being diversified. "If these funds over the long run can beat the rate of inflation and minimize volatility, they will have accomplished their purpose," says Sheldon Jacobs, editor of *The NoLoad Fund Investor*, a newsletter.

STRAITJACKET? Whether the funds, though fashionable, are right for you depends on how involved you want to be in managing your money. Many investors prefer letting a pro decide what looks good, and asset-allocation funds are proliferating. This year, both Vanguard and Fidelity have come out with their own offerings, bringing to at least 20 the number of asset-alloca-

tion funds that have been launched since 1983.

If you decide to buy into one of these funds, be sure you understand the difference between the two basic types: those that don't vary the mix of assets and those that do. The first kind—the fixed fund—takes a dogmatic approach. The premise is that it's impossible to time the market, so you're better off investing in an optimal combination of assets and never changing it. While this might make some investors feel straitjacketed, others like the stability of such an idea.

Each fixed fund has a different optimal mix of assets. Permanent Portfolio invests

a fairly speculative fund. In 1985, it was up 40.8% because it was so heavily invested in gold and international stocks.

TRICK OR TREAT. Of 18 major funds with a track record (table), only a few are fixed. More popular are the "variable-mix" asset-allocation funds. Things change, their managers argue, so it's better to manage the mix actively. Using economic models, they believe it's possible to know which markets are undervalued and get into them, and which are overvalued and get out.

That's a tall order. Fidelity Asset Manager is 45% invested in money-market funds, 25% in bonds, and 30% in equi-

time, says Beckwith. That would come from a projected average mix of 40% bonds, 30% equities, and 30% cash money-market funds. It only allowed to stray from these percentages within prescribed ranges. The fund's own gold, international stocks, and junk bonds. In its first 3½ months, it posted a 5.2% return and has attracted an impressive \$110 million.

Even for pros, getting the timing right is tough. Stan Salvigsen, who runs the Drusus Capital Value Fund, turned in a terrific 34.5% total return in 1987 by being out of the stock market when it crashed. But his fund turned in a so-so 8.1% return in 1988.



35% in T-bills, 20% in gold, 15% in real estate, 15% in U.S. stocks, 10% in Swiss francs, and 5% in silver. The fund beat the S&P 500 in 1987, but it significantly trailed the market its other six years.

USAA Cornerstone, another "fixed-mix" fund, invests 20% each in U.S. stocks, international stocks, gold, real estate, and U.S. government securities. While this might seem conservative, it is really

ties. At some point soon, Robert Beckwith, who manages the fund, will have to make a tricky interest-rate call and decide when to move from short-term money-market funds into long-term bonds. "It's going to be a big decision for people to make," says Beckwith. "Fidelity will do it for you."

The fund, launched in January, is aiming for a total return of more than 8% over

and a mediocre 3.77% so far this year, the result of missing out on a healthy economy and strong stock market. "The economy surprised us," he says.

Salvigsen is still waiting for an economic downturn. He's 90% in long-term T-bonds and 10% in stocks. Why not just buy into a bond fund? Because, Salvigsen says, an investor is buying "strong convictions about when to get t-

ASSET-ALLOCATION FUNDS: A MIXED REPORT CARD

	TOTAL RETURN		
	1987	1988	(%) 1989*
AMEV ADVANTAGE ASSET ALLOCATION	NA	NA	6.90
BAILARD BIEHL & KAISER DIVERSA	8.37	6.77	4.17
BLANCHARD STRATEGIC GROWTH	16.37	7.40	4.23
DEAN WITTER STRATEGIST	NA	NA	9.41
DREYFUS CAPITAL VALUE	34.45	8.13	3.77
HIDDEN STRENGTH MODERATE ASSET ALLOCATION	4.31	13.97	7.63
INTEGRATED TOTAL RETURN	NA	17.72	6.65
MIMLIC ASSET ALLOCATION	4.42	10.21	5.84
MORISON ASSET ALLOCATION	1.36	5.25	7.07
NATIONAL STRATEGIC ALLOCATION	NA	6.25	4.49
OPPENHEIMER ASSET ALLOCATION	NA	16.83	7.81
PAINWEBBER ASSET ALLOCATION	1.37	11.34	3.06
PERMANENT PORTFOLIO	13.15	1.28	1.14
PRUDENTIAL-BACHE FLEXIFUND — AGGRESSIVE	NA	10.97	5.56
PRUDENTIAL-BACHE FLEXIFUND — CONSERVATIVE	NA	7.01	4.63
SHEARSON LEHMAN HUTTON MULTIPLE OPPORTUNITY	NA	-5.61	15.32
USAA INVESTMENT TRUST CORNERSTONE	9.00	8.38	6.17
WELLS FARGO ASSET ALLOCATION	8.54	9.70	3.25

*Through Apr. 21 NA = not available (fund not in existence)

DATA MORNINGSTAR INC

bonds and into
cks."

When choosing a
d, take a careful
at expense ratios,
amount of dollars
\$100 of invest-
nt withheld to cov-
management fees
other overhead.
average asset-al-
ation fund's ex-
se ratio is 1.61% of
ual assets, com-
ed with 1.02% for
nced funds, those
ested in stocks and
ds, according to
ual Fund Values,
advisory service.
e, such as Shear-
s Multiple Oppor-
ty Fund, are as
as 3%. The funds
the higher fees
l to be those with

the active portfolio turn-
; which boosts transaction
s.

you're willing to make a
basic decisions, you
ht be better off using a
ole system and allocating
assets all by your lone-

about what you're doing.
"What drives asset allocators
is the conscious comparison of
the merits of different invest-
ments at any point in time,"
says William Donoghue, who
publishes *Donoghue's Money-
letter*, a newsletter.

a 10.3% return—compared
with a 9.3% return for the S&P
500 during the same period. It
also proved less risky, since
the S&P 500 went down six
times, while Biehl's index
went down only twice—in
1973 and 1974, when the oil

market funds, 45% in stock
funds, and 10% in real estate
funds, avoiding precious met-
als altogether. Spread the
stock investment between
large- and small-capitalization
stocks and international
stocks. Which ones? "The pre-
cision doesn't have to be
there," says Markese.

FREE ADVICE. Investors should
plan on rebalancing their
funds about once a year. For
example, if stocks do well
they might end up overrep-
sented. At the close of a year,
add up the total assets, di-
vide by five, and redistrib-
ute them.

You may want to change
your initial mix, too. Asset
allocation is the latest mar-
keting tool, so advice on the
right mix abounds. Most bro-
kerage firms now make spe-
cific recommendations on the
best asset mix. Newsletters
also publish suggestions and
regularly revise them.

The cost of allocating your
own assets is low. A \$50,000
investment distributed be-
tween five no-load mutual
funds, rebalanced or redistrib-
uted two times a year, would
cost about \$500 in fees and
other charges for switching
funds. At the very least, in-
vestors can benefit from sit-
ting down and figuring out
which baskets their eggs are
in.

Leah Nathans



e. "We all need to be as-
allocators. We all don't
these funds," says John
ese, research director of
American Association of
idual Investors.
st investors are already
ncious asset allocators:
y have some funds in
s, some in a money-mar-
ccount, some in stocks or
ock fund, and they have
y in their homes. But to
right, you have to think

Experts and tyros alike say
that doing it yourself is fairly
easy. Investors simply divide
up their assets between dif-
ferent no-load mutual funds.
BB&K Diversa's Larry Biehl
recommends a simple formula
of putting 20% each in five
funds: money market, stock,
international stock, tax-ex-
empt bond, and real estate.

According to Biehl's calcu-
lations, over the past 22 years
this particular mix has earned

shock sent most asset values
careening.

Biehl recommends using
mutual funds that broadly
represent the market and are
inexpensive to own. For the
equity portion, he likes a
stock-index fund that mirrors
the S&P 500, such as the Van-
guard Index Trust Fund. For
international equities, the
Vanguard World Internation-
al Fund is diversified among
foreign stock markets; for

Smart Money

THIS PENNY-STOCK SCAM PACKS A ONE-TWO PUNCH

Playing the penny stock market is a risky proposition under the best of circumstances. The odds, naturally, are high against coming across another Apple Computer or Polaroid among the hundreds of low-priced issues promoted by scores of dealers. And even if the stock has potential, there's a growing risk that the brokerage house making the market in it will abruptly go out of business (BW—Mar. 13).

Tempted anyway? Then you should be aware of a tax pitfall that can make you a loser even when you think you're ahead of the game. Recent charges by the Securities & Exchange Commission against the largest penny stock firm, Stuart-James Co., provide a good illustration. The firm denies all of the SEC's allegations.

The SEC says that Stuart-James salespeople promised hefty profits on initial public

'Crossing' can stick you with paper losses and a tax bite

offerings. All the customers had to do was agree to sell the shares back to the firm the next day, when the issue would begin trading on the secondary market. The SEC doesn't say exactly how much profit was guaranteed. But despite an SEC crack-down, the pitches keep coming from various firms, and brokers say that promises of "guaranteed" gains on the order of 30% aren't rare.

A WALLOP. That's quite a return for a one-day investment. Except for one thing—penny stock brokers don't like to buy back stock with the same hard cash they so

eagerly took from investors. Instead, they do their best to "cross" investors into another favored stock. That's the kind of transaction that can pack a tax wallop.

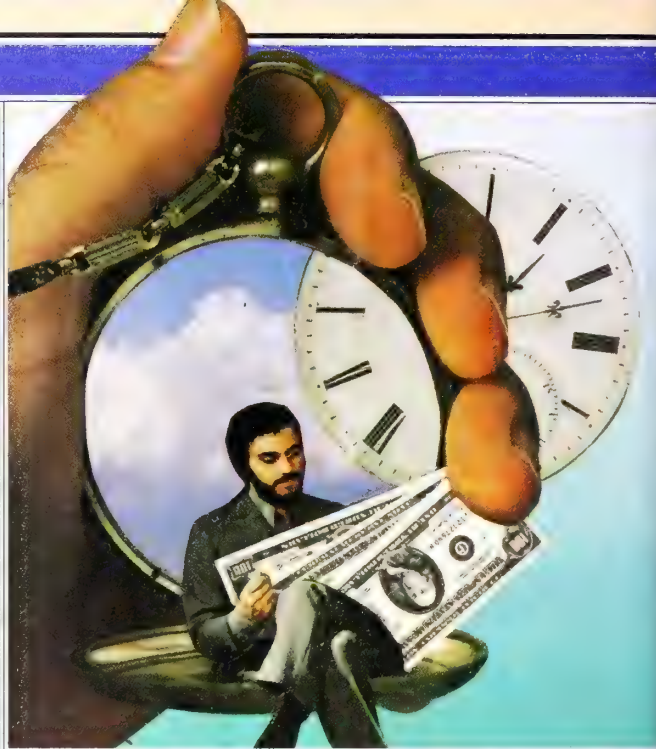
Consider hypothetical stock A, which you bought for 8¢. Your broker promises to move you out of it at 10¢—a 25% gain. It just so happens he knows about a hot company—stock B—that owns the patents to an "electrothermodynamometer." This device, he says, can efficiently "desalinate" seawater, and company B is about to reach an agreement in principle to license it to "several major municipalities" on the West Coast.

It sounds as if stock B can't miss, so your broker takes the 10¢ from stock A and buys stock B for you, also at 10¢ a share. So far, so good. But even in legitimate penny stock dealings, the spread between buying and selling prices is usually enormous. You probably couldn't sell stock B back for more than a nickel.

REAL GAIN. Now fast-forward the scenario to next year. The invention still has some bugs, the broker says, so you still couldn't get more than 5¢ a share—which means a paper loss of 5¢. But as far as the IRS is concerned, you've made 2¢ a share on stock A—a real gain, not a paper one, even though you haven't seen any of the proceeds.

So why was your broker so anxious to get stock A back? There's a good chance he marked it up to 30¢ and sold it to someone else as a proven highflier. And at many penny stock firms, you never would have gotten that "guaranteed" gain on stock A unless you had agreed to be rolled over into stock B.

David Zigas



What's In

NOW GRANDDAD'S TIMEPIECE IS RIGHT UP-TO-THE-MINUTE

The popularity of pocket watches, connoisseurs often say, rises and falls with the popularity of vests. Vests may be out these days, but pocket watches are definitely in. At a recent Christie's auction in New York, "watches that fetched \$6,000 six months ago were going for \$12,000," says Vice-President Jonathan Snellenburg.

Such five-figured antiques are far different from the thick gold instrument that most people envision as a pocket watch. This type, the classic American railroad watch, has its devoted fans, who pay anywhere from \$200 to \$1,000 for one. But most collectors prize Art Deco dress watches, which start at \$800. Light and slim, they were made in a variety of shapes, from square to octagonal, and in materials such as platinum, jade, and onyx. The concept was: "The watch is a piece of jewelry that tells time," says Ralph Destino, chairman of Cartier, which made some of the finest.

But the most valuable

watches don't just tell time. As far back as 1800, pocket watches boasted technical features such as minute repeaters (press a button and the chime the minutes past the quarter hour), chronograph (stopwatches), and perpetual calendars. The more "complications" a watch has, the more it's worth: Prices start at around \$3,000 for a repeater and can mount to \$200,000 for one with a variety of astronomical, calendar, and timekeeping functions.

USEFUL. Though such antiques are mainly for collecting, some gentlemen are actually donning watches—often modern ones. At Gruen Marketing in Wilkes-Barre, Pa., pocket watch sales have tripled in the past four years. "It's a nice little anachronism for everyday life," says Daniel Scherlis, president of Applied Reasoning, a computer company in Cambridge, Mass. His Seiko does have its uses, however. "Place it in your pocket at a meeting, and no one will tell when you sneak a look at the time."

Troy Seigler



THE BMW 525i IS SLOWER, LESS ROOMY AND COSTS \$10,000 MORE. MAYBE IT'S THE NEW MATH.

INTRODUCING THE 740 GLE 16-VALVE.

It didn't seem odd to our engineers that the new Volvo 740 GLE 16-valve outperformed the BMW 525i from 0 to 60 mph.* After all, the 153 horsepower, twin-cam may be Volvo's most advanced engine to date.

It certainly wasn't peculiar to our independent tests for 1989 automatic transmission models.

designers that the Volvo provides more front headroom and rear legroom. With standard amenities such as heated seats, air conditioning and a power sunroof, the Volvo interior is designed to make your driving experience more pleasurable.

And it didn't come as a surprise to Volvo enthusiasts that the 740 GLE 16-valve comes equipped with safety features such as a driver's side Supplemental Restraint System (unlike the

BMW) and an anti-lock braking system (just like the BMW).

What everyone agreed was bizarre, however, was the fact that the BMW costs an alarming \$10,000 more.[†]

Test drive the new 740 GLE 16-valve. Because a Volvo, unlike many of today's sticker prices, makes all **VOLVO** the sense in the world. A car you can believe in.

[†] 1989 manufacturer's suggested retail prices.

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Outdoors

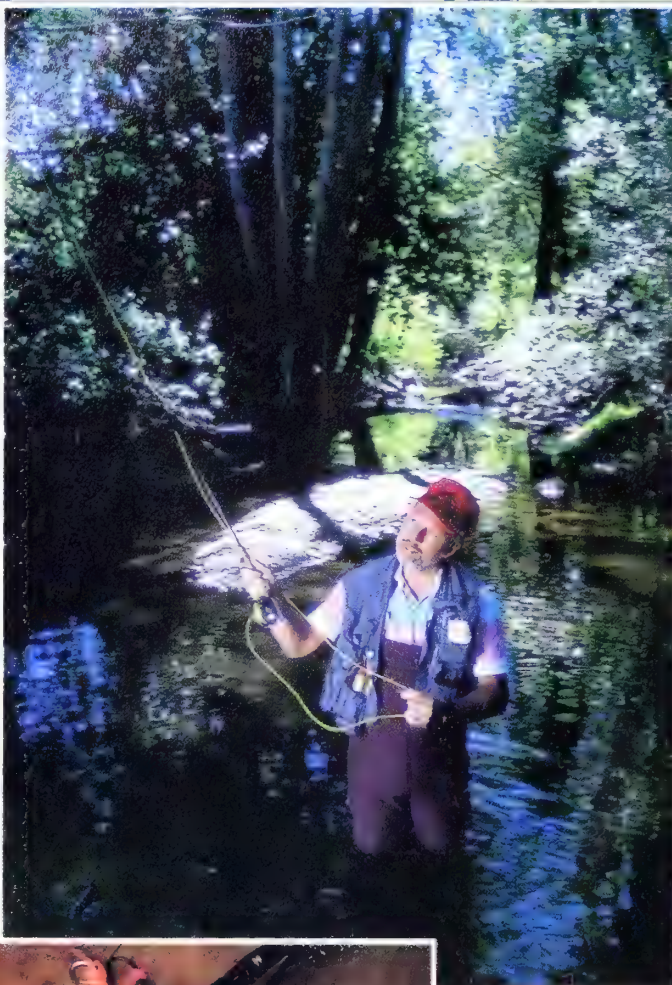
HOOKING THE PERFECT FLY ROD

Two years ago, venture capitalist Paul Dali of Menlo Park, Calif., took up fly-fishing as a way to unwind. But these days he finds himself ducking into fly shops and devouring fishing magazines with the same "due diligence" he used to reserve for scrutinizing business plans.

Indeed, it sometimes seems that the draw of the sport's tackle and accoutrements is as powerful as a salmon's need to spawn. New converts such as Dali quickly pass the point where they can make do with just one all-around version of the sport's most fundamental tool, the fly rod.

FEISTY SALMON. The three basic variables in choosing a fine fly rod are length, material, and line weight. Fly rods typically range from 7 to 10 feet long. While fiberglass and boron rods are available, most fishermen today opt for bamboo or graphite. They handle lines from the delicate two-weight for light trout fishing to the 12-weight used to pursue feisty salmon.

Joel Alvord, president of Boston's Shawmut National Bank, swears by a lightweight, 6½-foot bamboo rod. He's part of a counter-trend: In recent years the traditional split-cane bamboo rod has been overshadowed somewhat by space-age fibers because bamboo is heavy, expensive, and less strong. But rodmakers report a "back-to-nature" movement that has created a resurgence in sales of bamboo. "There's really no functional advantage to bamboo, but it looks nice, smells nice, and has a willowy, softer action," explains Nelson Ishiyama, a Palo Alto (Calif.)



■ VENTURE CAPITALIST PAUL DALI'S LOVE OF FLY-FISHING HAS HIM COLLECTING THE LATEST TACKLE

attorney and rod collector.

Fine bamboo rods start at about \$1,000. At Thomas & Thomas in Turners Falls, Mass. (413 863-9727), rodmaker Tom Dorsey's staff will spend more than 45 man-hours on T&T's top-of-the-line bamboo rod, hand-rubbing the varnish and matching the six triangular strips of honey-combed bamboo that are glued together to make a shaft. If you seek individualized features such as specially colored guide wraps, a custom grip, engraved metal fittings,

a leather case, or an unusual length, the price can approach \$2,000.

For anglers unwilling to fret about the safety of such works of art, graphite is the choice. It's flexible yet tough, durable yet light. Quality graphite rods retail in the

\$200-to-\$400 range.

Manufacturers such as Sage, Fenwick, and Orvis are all making good rods that can be purchased right off the shelf. But don't rule out going custom: For a few more dollars, an angler can purchase not just a good rod but a unique piece of equipment.

Some custom rods are custom only in the cosmetic sense: The metal loops, or guides, are bound to the shaft of the rod by threads tightly wound in individualized colors and patterns.

A few rodmakers, like Oregon's Skip Morris (503 637-7460), pride themselves on going further. While he offers limited colors and wrap patterns, Morris will make sure each rod he builds fits the angler's needs in action and performance. His price range is \$290 to \$600.

AUTOGRAPHED. Morris may spend a half hour or more grilling you about your fishing practices. How wide are the streams that you fish? What are the shortcomings of your current setup? And he'll finish your rod by painting your name on the shaft and autographing it. And if you ever damage the rod, his records will help him restore it.

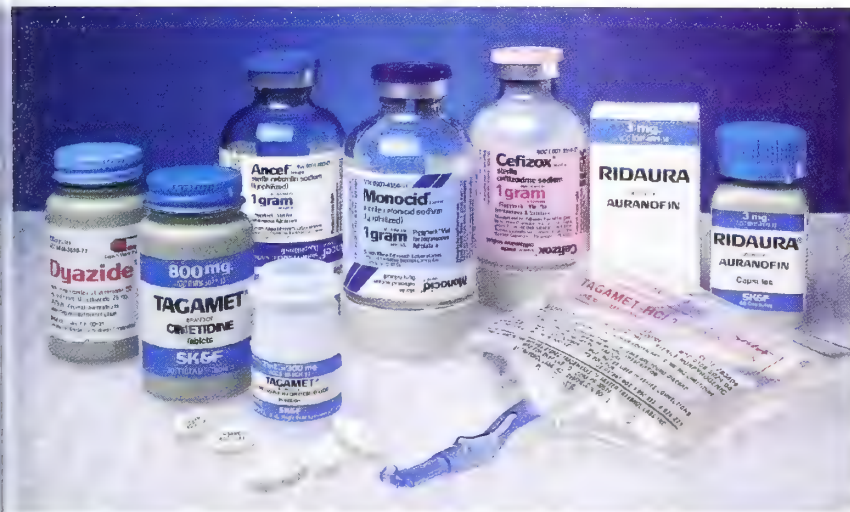
Another basic consideration is travel. A two-piece model that can be stowed in a trunk is perfect for a near fishing hole. Harold Mill, Houghton Mifflin chief executive, has a lineup of two-piece rods in both bamboo and graphite that he uses in Vermont. But his occasional trips to Chile or Alaska have him dropping hints to his wife (and fishing partner) about a four-piece style. These rods, much-improved over earlier versions, fit in a case less than 30 inches long, small enough to be carried on an airplane. *Joan O'C. Hamilton*

Worth Noting

■ **NO LINES, NO FINES.** Make a visit to the U.S. Customs office in your area with your costly new camera or recorder before you head overseas. They will give you a registration form so that you can get back into the country without paying a 10% duty charge on the equipment—and without waiting in a line for a form at the airport.

■ **LOCKED IN.** If you're traveling to Europe this summer and think the dollar may be weaker, Swiss Bankers Tellers Cheques now let you lock in today's rates. Denominated in Swiss francs, they are available at such major banks as Chemical, Bank of America, and Citibank.

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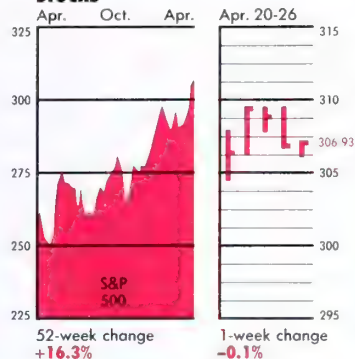


Investment Figures of the Week

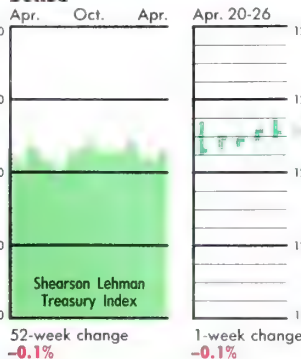
COMMENTARY

First profit reports for the first quarter helped send the stock market bounding over the Dow Jones mark, only some 300 points from the all-time high. First-quarter GNP—up 5.5%—revealed unexpected strength in the economy. The bond market, which had been anticipating a slowdown, nonetheless finished the week unchanged. In Tokyo, stocks initially dipped but then rallied after Prime Minister Takeshita agreed to step down in the wake of a political scandal.

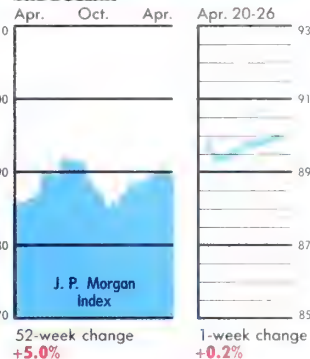
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	2389.1	0.1	16.7
COMPANIES (Russell 1000)	162.2	0.0	16.4
COMPANIES (Russell 2000)	163.6	0.7	13.8
COMPANIES (Russell 3000)	174.2	0.1	16.2

IGN STOCKS	Latest	% change (local currency) Week	% change 52-week
ON (FINANCIAL TIMES 100)	2093.4	0.5	15.9
ON (NIKKEI INDEX)	33,434.9	0.2	23.0
TO (TSE COMPOSITE)	3578.2	-0.6	6.9

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.8%	8.7%	6.0%
30-YEAR TREASURY BOND YIELD	9.0%	9.0%	9.0%
S&P 500 DIVIDEND YIELD	3.4%	3.5%	3.4%
S&P 500 PRICE/EARNINGS RATIO	12.0	12.3	14.2

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	286.07	285.1	Positive
Stocks above 26-week moving average	64.6%	63.2%	Neutral
Speculative sentiment: Put/call ratio	0.21	0.22	Negative
Insider sentiment: Vickers sell/buy ratio	1.42	1.39	Positive

INDUSTRY GROUPS

4-WEEK LEADERS	% change 4-week	% change 52-week
AIRLINES	19.2	55.4
RESTAURANTS AND HOTELS	15.6	21.4
BANKS AND LOANS	13.7	37.9
REBUILDING	13.2	45.5
SEMI-CONDUCTORS	12.3	-10.9

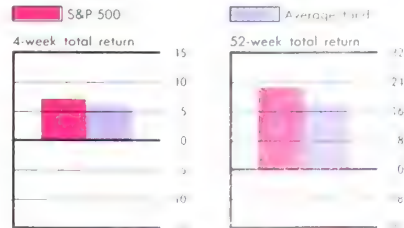
4-WEEK LAGGARDS	% change 4-week	% change 52-week
MANUFACTURED HOUSING	-8.6	23.8
COAL MINING	-2.8	0.8
REAL ESTATE INVESTMENT TRUSTS	-1.6	-5.7
TRUCKS	-0.6	8.9
HEALTH CARE SERVICES	-0.1	-25.0

Strongest stock in group	% change 4-week	% change 52-week	Price
NWA	65.4	148.3	100 1/4
HOLIDAY	35.4	57.4	38 3/4
GREAT WESTERN FINANCIAL	14.9	35.0	17 3/8
CENTEX	17.9	55.3	33
INTEL	17.5	-7.7	28 1/2

Weakest stock in group	% change 4-week	% change 52-week	Price
FLEETWOOD ENTERPRISES	-11.2	22.5	25 7/8
NEWMONT MINING	-4.5	3.5	36 3/4
LOMAS & NETTLETON	-9.0	-25.6	16 3/8
CHRYSLER	-3.0	3.2	24
BEVERLY ENTERPRISES	-10.8	24.5	8 1/4

MUTUAL FUNDS

RS	Week total return	%	LAGGARDS	Four-week total return	%
NATIONAL AVIATION & TECHNOLOGY	16.3		VAN ECK GOLD/RESOURCES	-7.0	
TWENTIETH CENTURY VISTA INVESTORS	13.7		SLH PRECIOUS METALS & MINERALS	-6.6	
INVESTMENT EMERGING GROWTH	13.3		USAA INVESTMENT TRUST GOLD	-6.4	
Week total return	%		52-week total return	%	
FMANN	59.1		STRATEGIC GOLD/MINERALS	-22.7	
NATIONAL AVIATION & TECHNOLOGY	41.6		SLH PRECIOUS METALS & MINERALS	-14.3	
UMBIA SPECIAL	40.9		STRATEGIC INVESTMENTS	-12.8	



RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio. Pages indicate relative total returns.	U.S. stocks	Foreign stocks	Treasury bonds	Money market fund	Gold
	\$11,835	\$11,821	\$10,996	\$10,667	\$8,602
	+0.24%	-0.76%	-0.26%	+0.16%	+0.51%

on this page are as of market close Wednesday, Apr. 26, 1989, unless otherwise indicated. Apr. 25. Mutual fund returns are as of Apr. 21. Relative portfolios are valued as of Apr. 25. A more detailed explanation of this page is available on request.

INSURE DEPOSITORS, NOT BAD RISKS

The system we use to protect depositors in our banks and savings and loan associations was a major cause of the thrift crisis. If something isn't done fast to repair it, other crises are sure to follow. Deposit insurance is to be the subject of a study group set up by Congress as part of its response to the President's emergency S&L rescue package. That impulse is a good one, because deposit insurance turns out to contain within it the seeds of high-risk shenanigans in an industry that needs prudence above everything else.

By pledging to refund losses of up to \$100,000 on each account, the government relieves the public of worry over whether banks or thrifts are taking foolish risks with depositors' money. If an institution's bets don't pan out, Uncle Sam will be sure to bail out depositors—and often the institution. The upshot: Deposit insurance is the source of bad risk-taking, and at the same time pays for its consequences.

Whatever free-market purists might say, the government's guarantee is here to stay—and should be. Because of it, the financial system has avoided a banking panic for 50 years, and no one wants to live through one again.

So the real issue is not debating a private insurance system vs. a federal one, but making the federal deposit insurance system function better. Here are some ideas:

Lower the deposit insurance ceiling from \$100,000 per account to, say, \$50,000 per household. If that's politically impossible, at least limit the insurance coverage to one account per household.

Charge financial institutions premiums for government insurance based on a sliding scale: the riskier the loan portfolio, the higher the premium.

Free the regulators and their insurance funds from congressional interference. The government's insurance agencies need to develop the stature of the Federal Reserve to be politically immune from Congress. The regulators must be free to protect taxpayer money and the financial system without worrying about threats from a powerful congressman who is being leaned on by influential constituents.

HIP BUT NO HOORAY FOR COLD-FUSION 'PIONEERS'

The jury is still out on whether researchers in Utah have achieved nuclear fusion on a table-top (page 100). But the story tells a lot about scientific research these days—and raises some disquieting questions.

Much of science today is big and expensive. And that's worrisome. One recent study of the nature of scientific genius shows that revolutionary discoveries—the theories of relativity and continental drift, for example—have come largely from solitary iconoclastic scientists, not from enormous projects with high price tags. Often working at the

fringes of science, these "geniuses" are phenomenal risk takers, willing to stick their necks out to propose what seems at first to be scientific folly.

Cold fusion in a bottle certainly qualifies as an unlikely idea. The physicists who have spent their careers trying to induce hydrogen to fuse in multimillion-dollar machines didn't think it was possible. Instead, it took two chemists who dared to venture outside the boundaries of their discipline to look at the problem of achieving fusion power with fresh eyes. They were willing to give it a try, building a low-tech apparatus with their own money, not a big government grant.

But one can quarrel with the way they disclosed their findings and for their apparent desire not to share credit with others. In violation of normal scientific procedure they held a news conference before publishing their paper. And maybe they jumped the gun. When the scientific reviewers at *Nature* raised questions, the two scientists withdrew their paper rather than respond. B. Stanley Pons and Martin Fleischmann deserve credit for taking the risks, but they have failed to live up to the highest standards of science.

THE WINDS OF DEMOCRACY ARE STIRRING ASIA

The resignation of Japanese Prime Minister Noboru Takeshita was perhaps inevitable. A mounting public furor over Japan's money politics had discredited Takeshita and the leadership of the ruling Liberal Democratic Party. Still, Takeshita is to be commended for taking the painful move of accepting responsibility and stepping down in an attempt to end Japan's political deadlock—a lesson some U.S. political and financial leaders might well heed.

But the broader significance of Japan's Recruit Co. scandal is that a new wind is blowing through the capitals of America's leading trade and security partners in Asia. The Japanese, proud of their economic prowess, are demanding an equally modern political system that is less accountable to big money and more accountable to public perception.

In China, the students demonstrating against the Communist Party are thirsting for a political system in which the individual has greater say. In South Korea, President Roh Tae Woo, a former general, is under pressure not only from radicals and students but also from an increasingly affluent middle class that is eager for a clean break with a military-dominated past. Taiwan also is undergoing a major political transition in which reform-minded leaders born in Taiwan are taking control from the conservative, mainland-born generals.

It would be naive to suggest that Western-style democracy is suddenly breaking out. These debates are taking place in distinctively Asian settings and will be resolved in distinctively Asian ways. But there are clearly forces demanding more open, responsive governments. Although this may make it more difficult for Washington to exert its will in the region, over the long run it is a healthy trend—and one that the U.S. must support.

May 15

► THE SAD SAGA OF A PENNY-STOCK COMPANY ► CAMPEAU'S WOES

STARTER KIT
100 COMPANIES
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BusinessWeek



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MAY 15, 1989

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The Rush to ESOPs

EMPLOYEE OWNERSHIP

Is It Good For You? Or Your Company?

PAGE 116



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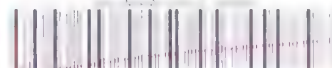
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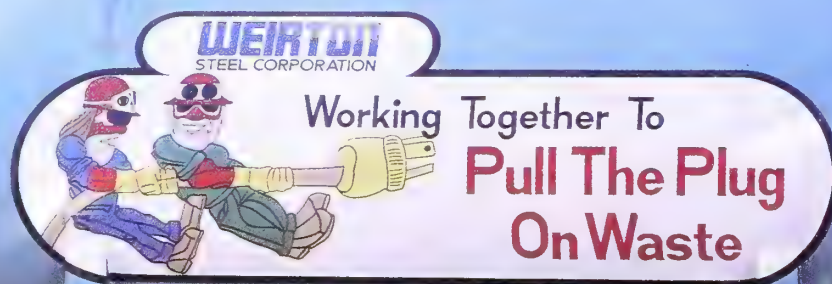
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UNALLOYED SUCCESS: 100% EMPLOYEE-OWNED SINCE 1983, WEIRTON HAS PERFORMED BETTER THAN MOST U.S. STEELMAKERS

Cover Story

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Why have an estimated 200 public companies set up employee stock-ownership plans during the past two years? Management likes them because they cut tax bills, erect a takeover defense, clamp a lid on the cost of pensions, and perhaps even spare companies the nightmare of monumental retiree medical bills. But do employees benefit?

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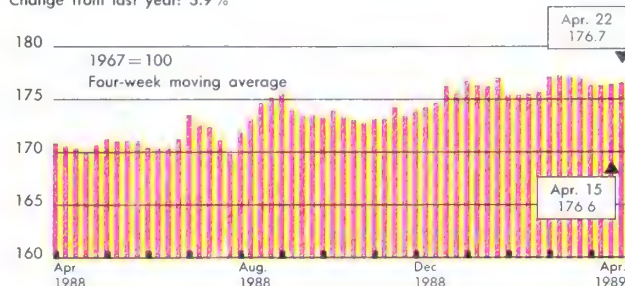
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Washington's tunnel vision on NATO
Don't forget the 'E' in ESOP
No hiding from shareholders

BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 3.9%

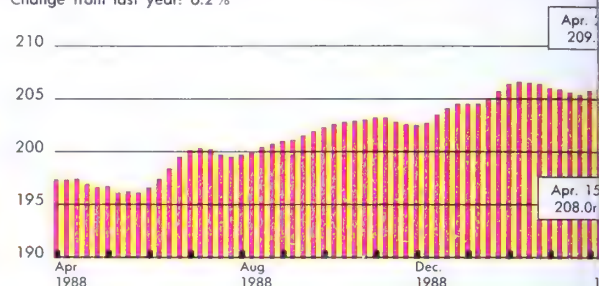


The production index increased for the week ended Apr. 22. Growth in the index has been sluggish over the past four weeks. The seasonally adjusted output of trucks, autos, rail-freight traffic, paper, and paperboard rose. Production of lumber, electric power, coal, and crude-oil refining dropped. Steel output was unchanged for the week. Before calculation of the four-week moving average, the index declined to 176.6 from 176.9 posted during the prior week.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.6%
Change from last year: 6.2%



The leading index continued its upward climb during the week ended Apr. 22. Indications of faster economic growth were given by higher stock prices, fewer business failures, and faster growth in materials prices and real estate loans. The index offset a decline in M2 growth. Bond yields were unchanged from the prior week. Before calculation of the four-week moving average, the index also increased, to 211.4 from a level of 209.5 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/29) thous. of net tons	2,042	2,055 #	0.3
AUTOS (4/29) units	160,258	161,498r #	0.1
TRUCKS (4/29) units	86,368	90,858r #	-1.0
ELECTRIC POWER (4/29) millions of kilowatt-hours	50,603	49,205 #	5.2
CRUDE-OIL REFINING (4/29) thous. of bbl./day	13,103	13,002 #	-0.2
COAL (4/22) thous. of net tons	19,149 #	19,061	7.9
PAPERBOARD (4/22) thous. of tons	742.0 #	742.8r	4.4
PAPER (4/22) thous. of tons	754.0 #	742.0	0.0
LUMBER (4/22) millions of ft.	466.7 #	486.9	-7.8
RAIL FREIGHT (4/22) billions of ton-miles	20.1 #	20.0	4.1

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/3)	134	132	125
GERMAN MARK (5/3)	1.89	1.88	1.68
BRITISH POUND (5/3)	1.68	1.69	1.87
FRENCH FRANC (5/3)	6.38	6.35	5.71
CANADIAN DOLLAR (5/3)	1.18	1.19	1.23
SWISS FRANC (5/3)	1.68	1.66	1.40
MEXICAN PESO (5/3) ³	2,435	2,425	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/3) \$/troy oz.	378.600	383.850	-14.6
STEEL SCRAP (5/2) #1 heavy, \$/ton	116.50	116.50	-1.3
FOODSTUFFS (5/1) index, 1967=100	224.0	224.6	-1.5
COPPER (4/29) \$/lb.	144.5	147.5	47.9
ALUMINUM (4/29) \$/lb.	100.0	98.0	-5.7
WHEAT (4/29) #2 hard, \$/bu.	4.53	4.51	45.2
COTTON (4/29) strict low middling 1-1/16 in., \$/lb.	60.32	60.95	-1.6

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Row data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/28) S&P 500	308.32	306.14	
CORPORATE BOND YIELD, Aaa (4/28)	9.75%	9.80%	
INDUSTRIAL MATERIALS PRICES (4/28)	105.8	106.0	
BUSINESS FAILURES (4/21)	243	256	
REAL ESTATE LOANS (4/19) billions	\$321.1	\$319.3r	
MONEY SUPPLY, M2 (4/17) billions	\$3,093.0	\$3,094.4r	
INITIAL CLAIMS, UNEMPLOYMENT (4/15) thous.	288	320	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
CONSTR. SPENDING (Mar.) annual rate, billions	\$413.5	\$414.8r	
MANUFACTURERS' INVENTORIES (Mar.) billions	\$360.9	\$359.1	
MANUFACTURING SHIPMENTS (Mar.) billions	\$228.1	\$228.4	
PERSONAL INCOME (Mar.) annual rate, billions	\$4,349.7	\$4,315.6r	

Sources: Census Bureau, Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/17)	\$781.6	\$782.0r	
BANKS' BUSINESS LOANS (4/19)	314.2	312.0	
FREE RESERVES (4/19)	-396r	807r	
NONFINANCIAL COMMERCIAL PAPER (4/19)	118.0	112.3	30

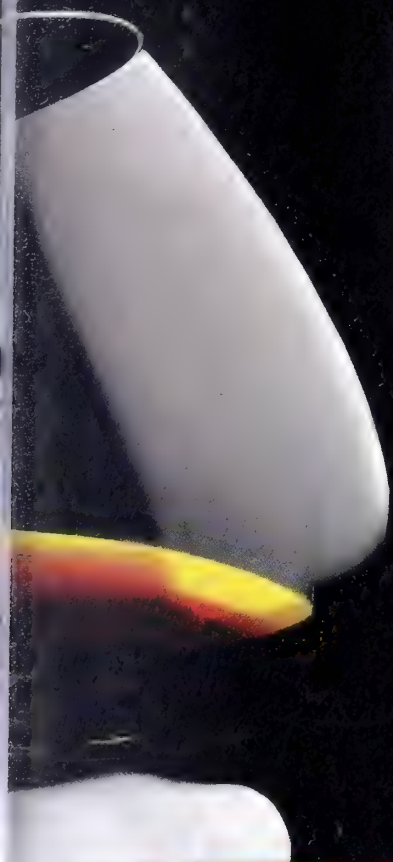
Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed as a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (5/2)	9.83%	9.85%	6.82
PRIME (5/3)	11.50	11.50	8.50
COMMERCIAL PAPER 3-MONTH (5/2)	9.71	9.76	6.98
CERTIFICATES OF DEPOSIT 3-MONTH (5/3)	9.80	9.80	7.05
EURODOLLAR 3-MONTH (4/26)	9.98	10.15	7.18

Sources: Federal Reserve Board, First Boston

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3M'S CREATIVITY TAKES A LOT OF PRACTICE

Your article "Masters of innovation" (Cover Story, Apr. 10) was refreshing and insightful. However, I would like to add one more rule that I have observed at 3M Co. both as an employee and subsequently as a consultant. They "develop the skill to innovate" continuously by asking if they can innovate better, by finding who has new ideas to help their innovation methods, and by constantly training employees in the basic innovation skills. And it is no secret that they use a lot of "creativity experts." 3M is on the client list of about everybody in who's who in creativity.

Tom Eskstein, President
T. E. Eskstein & Associates Inc.
St. Paul, Minn.

Corporations hoping to learn from 3M's innovative lead should take a long look at how this company finds and encourages future creative thinkers. Through its Science Student Recognition Day, Creative Wizards, and Visiting Technical Women programs, 3M channels a message to female and minority students who'll make up the bulk of newly emergent groups of workers. 3M lets these kids know that technical careers are for everyone.

This nation has a student population vastly underprepared for jobs requiring math or science skills. The U.S. is at the brink of a technical crisis, and 3M is one company trying to pull us back from the precipice.

Janice Pottker
Potomac, Mich.

MESSAGE TO DETROIT: MORE MILES TO THE GALLON

Your heartfelt (lungfelt?) thanks for the hook, Mr. Bush" (Editorials, Apr. 10). Unless and until gasoline-fueled infernal-combustion engines and profligate use of all fossil fuels and derivatives such as pesticides, fertilizers, and plastics are recognized as the major polluters of the environment, the heaviest contributors to our trade imbalance, and a

prime factor in this nation's worsening energy security (due to overdependence on foreign oil), we are all hostage to the Big Three auto makers and their overseas counterparts.

Alternative energy sources must and will be improved and developed eventually. Meanwhile, conservation and reining in unbridled growth are our best hope. Strict enforcement of existing fuel-economy standards and progressive tightening of such standards are vital. Elsewhere in your same issue, Chrysler's government affairs director, Alberto Slechter, is quoted as saying: "You can make people buy what they don't want. Not easily, Mr. Slechter, but a step in the right direction might be cessation of the advertising campaigns glamorizing jackrabbit starts, high speeds, and sensual pleasures of overpowered "muscle cars," all bombarding a susceptible public. At least stop touting more and more of what people don't need!"

Jan C. Lundberg, President
Fossil Fuels Policy Action Institute
Fredericksburg, Va.

IT'S NOT TOO LATE TO RESTOCK THE EARTH'S FOOD SUPPLY

Regarding your article "The world's cupboard is emptying out" (Science & Technology, Apr. 3), maintaining a sufficient world food supply is indeed a concern. Each day as many as 40,000 children die of hunger-related causes and many more are malnourished. As long as the world population continues to grow and environmental, economic, and societal factors continue to thwart our efforts to increase food production or to improve the quality of production, this issue will remain cause for concern.

Nevertheless, I think it is premature to relinquish our destiny to the hands of fate, for indeed much progress has been made in the past, and much more is possible in the future. Aside from the threat of natural disasters, it is within our control to reverse the trends—halting population growth in some areas, dwindling fresh water supply, erosion of topsoils, environmental damage, all of which threaten the adequacy of the world's food supply. To the contrary

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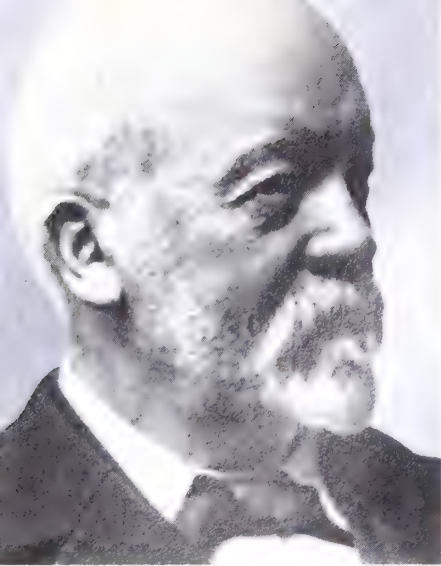
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“It is personalities,
not principles that move
the age.”

Oscar Wilde



Gottlieb Daimler (1834 - 1900)
Inventor of the automobile



Karl Benz (1844 - 1929)
Inventor of the automobile



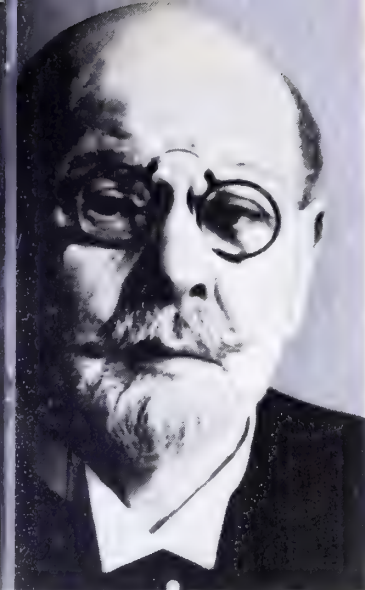
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and founder of AEG



Karl Maybach (1879 - 1960)
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Readers Report

we can make great strides in these areas and match the accomplishments of the "Green Revolution."

Our goal is to draw attention to what has been accomplished in improving the world food situation, and what can be done to better it in the future. With proper commitment from policymakers, business, science, and the social community, we can assure a sufficient world food supply. As Dr. Robert F. Chandler Jr., the 1988 World Food Prize Laureate, put it: "If we can meet the challenge of outer space, if we can commit huge sums for national defense, then I feel certain we can meet the challenges of our planet's food supply."

A. S. Clausi, Chairman
Council of Advisers
General Foods World Food Prize
White Plains, N. Y.

UNCOUNTED, UNEMPLOYED, ... AND UNSUSPECTED IMPACT

Robert Kuttner's article "The labor market is a lot looser than it looks" (Economic Viewpoint, Mar. 27) is right on the mark. The current "uncertainty" of Federal Reserve policymakers is quite evident. Kuttner explains how this un-

certainty is caused by confusing signals based on misleading statistics. We know that tight labor markets cause inflationary pressures that call for a tightening of the money supply. If the unemployment statistics considered by the Fed were more representative of "real" unemployment, the Fed could translate the indicators into more effective monetary policy. Why do we continue to ignore the "discouraged" workers when recognizing their part in the macroeconomy could make the Fed's monetary policy a more effective tool against inflation?

Terry Comunale
Fort Salonga, N. Y.

Robert Kuttner argues that a 5.1% unemployment rate isn't inflationary since a large pool of discouraged workers exists who are not counted in the labor force.

That fact may be true, but his conclusion is not: These workers are most probably unskilled (or have a mismatch between their given skills and available jobs); were they part of the measured labor force, they would probably be classified as structurally unemployed. These workers, if hired, would require training, thus pushing up production costs and

prices. In that light, the current published unemployment rate does accurately convey labor-force slack and potential inflationary impacts.

Jonathan B. Wig
Associate Professor of Economics
University of Richmond
Richmond, V

DITCHING THE CAPITAL-GAINS TAX WON'T SPUR INVESTMENT

In Paul Craig Roberts' article, "Ditch the capital-gains tax once and for all" (Economic Viewpoint, Apr. 3) he states "Eliminating the capital-gains tax would reduce the cost of capital and increase investment..." In spite of major reductions in federal taxes on income earned from capital resources from 1964 through 1984, investment spending as a percentage of output has not much changed. The factual evidence indicates that taxation's impact on investment is minimal, thereby refuting his ideological assertion that "taxation causes investment to fall far short of the levels that are socially desirable."

Taxation of corporate income more than once is not unique; double or triple taxation of wages and salaries also o

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rs. My wages are subject to a city, state, and federal tax. Income is income, period. To tax some kinds of income (e.g., capital gains) at a lower rate than other kinds of income fails the fairness test of treating "equals equally." If no significant efficiency gains exist, why create inequality?

Carl J. Austermilller
Professor of Economics
Oakland Community College
Farmington Hills, Mich.

THE CONFLICT OF INTEREST IN THE OIL-SPILL CLEANUP

The comparison of airport rescue and fire operation with the Alaska oil spill in the article "Questions that keep surfacing after the spill" (Top of News, Apr. 17) is not valid. The airport-rescue service's equipment and readiness are not maintained by the airlines, but by a government agency operating the airport. The airlines pay indirectly for this service by way of landing fees paid to the airport authority. The oil companies, however, are directly responsible for cleaning up their own spills. Evidently the cost of maintaining such a standby effort is balanced with the probable cost of an oil spill. Airport rescue does not have such a con-

CORRECTIONS & CLARIFICATIONS

Because full fourth-quarter 1988 balance sheet data for Manville Corp. were not available to Standard & Poor's Compustat Services Inc. when the Top 1000 was published, Manville's market value was wrong. The correct figure as of Mar. 10, 1989, was \$291 million, or 100% of book value. Thus Manville's value index relative to its industry was 5.80, dropping the company from No. 3 to No. 111 on the list of 200 undervalued companies.

Also, while Manville's total market

value increased from Mar. 11, 1988, to Mar. 10, 1989, the company was restructured in October as it emerged from bankruptcy and issued one share of new common stock for eight shares of the old common. Accordingly, direct comparisons between the two market values are not meaningful.

"Olivetti and DEC cozy up" (In Business This Week, May 8) implied that American Telephone & Telegraph Co. will dissolve its relationship with Olivetti. AT&T said only that it is searching for a second supplier of PCs.

conflict of interest since the minimum standards are set by Federal Aviation Administration regulation. The solution may be a law that assigns the duty to maintain a suitable standby force to the federal government. The most likely agency for this would be the Coast Guard, which is already charged with enforcing marine environmental laws.

Peter J. Baker
Pittsburgh

The Exxon Valdez oil spill is unrelated to exploring the Arctic National Wildlife Refuge, as President Bush has stated. Yet any restriction of Alaskan

offshore exploration and development would only increase the need for greater imports transported by tankers to America and other nations. We can hamper and restrict our domestic production, but our exposure to environmental spills from imported oil is still a paramount risk.

Dailey J. Berard, President
Universal Fabricators Inc.
New Iberia, La.

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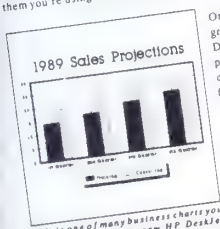
But they keep looking at the evidence.

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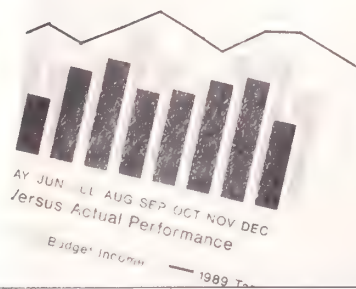
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THE NEW COMPETITORS: HOW FOREIGN INVESTORS ARE CHANGING THE U.S. ECONOMY

By Norman J. Glickman and Douglas P. Woodward
Basic Books • 374pp • \$19.95

CLOSING THE 'IGNORANCE GAP' ABOUT FOREIGN INVESTMENT

Foreign investment is among the most important issues facing the U.S. Yet too often, Americans revert to rigid ideological stances when debating the hundreds of billions of dollars flowing into the U.S. One camp holds that all such investment is good, the other says it is all bad. There is not enough sober middle-ground discourse on why giants such as Mitsubishi, Siemens, and Philips come to the U.S., what impact their investments have, and what the response should be.

Thus, *The New Competitors: How Foreign Investors Are Changing the U.S. Economy* makes a major contribution. Professors Norman J. Glickman of Rutgers University and Douglas P. Woodward of the University of South Carolina are not combatants in Washington politics, and they have not spent months traipsing around small-town America to see foreign investment up close. But they have digested virtually everything that has been written about foreign investment—and they have mastered the arguments.

The result is a balanced analysis whose tone is struck in the preface: "Many boosters and lobbyists for foreign multinational corporations have overstated the benefits of foreign investment, particularly the capacity for these companies to create jobs. At the same time, we find others—also guilty of exaggeration—who see foreigners as the main source of our economic dilemmas."

In lucid prose, Glickman and Woodward expose the misperceptions at both extremes. Analyzing the effect of foreign investment on employment, for example, they show the naivete of governors and mayors who insist that all foreign investment creates jobs. Most such investment, the authors write, goes to acquire existing U.S. companies. Even when foreign interests start from scratch, the job impact is not clear-cut.

Although foreign investment has benefited some regions, on a national basis, jobs may merely have been redistributed. Mitsubishi's joint venture with Chrysler in Bloomington, Ill., employs

plenty of Americans, but a General Motors foundry has closed in nearby Danville. Thousands of Americans are working for Nissan and its affiliates in the Nashville area, but GM closed a plant in Chattanooga. It's simplistic to say a U.S. plant closes for every Japanese plant that opens, but a long-term strategy of import penetration followed by direct investment is clearly raising competitive pressures.



Glickman and Woodward question another common assumption—that luring a major foreign company automatically improves the U.S. trade balance by lowering imports. Take a tour of a foreign-owned plant, and you will see lots of spanking new imported machinery. You will see a steady stream of foreign-made parts, and you will see a chain of suppliers from the company's homeland setting up plants of their own nearby. Finally, the new factory's products don't necessarily replace imports. In many cases, they actually expand the owner's market share.

Do these arguments mean that Glickman and Woodward are against foreign investment? Not at all. They spend equal time debunking the idea that the U.S. is being invaded by foreign influences against its will. On the contrary, the authors maintain, the increasing flow of foreign investment has been a direct result of American corporate and government policies. Many American companies have simply shut down large portions of their production or started buying from offshore suppliers, creating obvious openings for the New Competitors. On the macroeconomic front, sustained trade and fiscal deficits make America a prime environment for inbound investment.

The authors also point out the many potential benefits of foreign investment. The New Competitors bring capital, technology, and management practices from which Americans stand to gain. "Non-American multinational corporations hold a range of competitive advantages that could help revitalize U.S. industry," they contend.

To take advantage of such resources, however, local politicians—as well as suppliers, employees, and customers—have to get more sophisticated in the dealings with foreign companies. Glickman and Woodward suggest that states and cities temper the "mad scramble" against one another and drive more specific bargains with foreign interests. This might involve securing firm commitments on how many and what kinds of jobs will be created, what products will be imported and exported, and what technology and skills will be transferred.

The authors go astray in one of their prescriptions: suggesting that the U.S. set up a new federal agency to assemble information on foreign investment and monitor the New Competitors' activities. Some 16 federal agencies already collect such data, and the interagency Committee on Foreign Investment in the U.S. is showing signs of life. Establishing a new superagency isn't necessary and smacks too much of centralized control. Better to close, at the grass-roots level, what the authors call America's "ignorance gap" on how to manage the investments it has secured. After all, the front line of the battle is in places like Bloomington and Nashville—not Washington.

BY WILLIAM J. HOLSTEIN
Associate Editor Holstein has covered the foreign investment issue for BW for several years.

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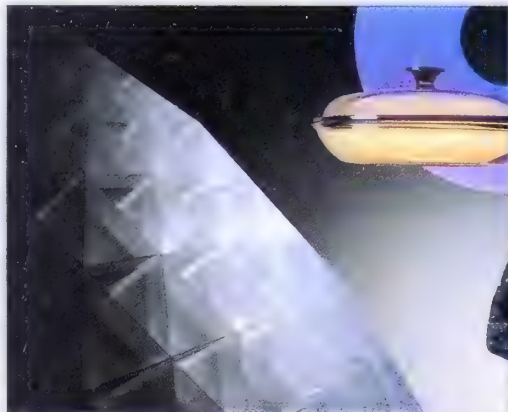


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100 DAYS OF TREADING WATER? SO WHAT?

BY ALAN S. BLINDER



In economic policy, haste more often than not makes waste. While America has a number of economic problems, it faces no immediate crisis—and the Bush team has had the good sense not to create one

I could have written a column carping about the economic decisions of the Bush Presidency's first 100 days. Such a column would have derided the recent agreement on the budget as hollow—full of the overly optimistic forecasts, accounting gimmicks, asset sales, and mythical savings that we have come to expect in the Gramm-Rudman era. It would have gone on to attack Treasury Secretary Nicholas F. Brady's approach to the developing-country debt problem as woefully inadequate. Next, it would have ridiculed the Administration's abortive proposal to tax savings and loan deposits, pointed out that the costs of the President's current S&L plan are grossly underestimated, and criticized it for the financial chicanery of borrowing through an off-budget agency—thereby raising costs to taxpayers for purely cosmetic purposes.

But I did not write that column, for the truth is that Bushonomics is off to a surprisingly good start. Bush's campaign rhetoric on the budget sounded ominously like something out of a Clint Eastwood movie. Yet the recently ended budget negotiations with Congress were a vast improvement over the posturing and baiting that characterized Ronald Reagan's budgeting approach. The Bush team actually seemed to want to write a budget, not just to make Congress look bad. Give them a gentleman's C for the phony outcome but a B for effort.

ANOTHER SIGNAL. Furthermore, we are hearing less about lipreading lately, and the dreaded "T" word has even been uttered a few times by Administration spokesmen. Apparently, the campaign promise not to raise taxes is being interpreted as a pledge not to raise taxes this year, leaving the door open for a more reasoned approach next year.

The complete about-face on Third World debt is a second signal that the new Administration is prepared to embrace reality. During the campaign, Secretary Brady adhered to the Baker Plan position that more growth-oriented Band-Aids would eventually enable the debtor nations to repay in full. This notion was dubious in 1985, and by 1988 it was looking slightly absurd. The Brady Plan marks a significant departure by accepting the notion that partial forgiveness should play a role in solving the debt problem. This, rather than the absolute sanctity of loan contracts, is now a central pillar of official U.S. policy—as it should be. Give the Bush team a B, maybe even a B+.

Next, the government is making a serious effort to clean up the debris of the S&L industry. The President's plan, as I have indicated, has its holes. And purists will duly note that it fails to address the

root causes of the problem. But the proposal does take meaningful steps to close more insolvent thrift institutions, raise capital requirements, and tighten regulatory supervision. It does not pretend that the taxpayer will get off scot-free or that the free market will straighten everything out. Give the Administration a B-.

NO RUSH. In addition, President Bush is gradually assembling a first-class economic policy team. Though a bit too political for my tastes, Richard G. Darman is as sharp a budget director as you are likely to find. Bush's Council of Economic Advisers, headed by Michael J. Boskin, is capable, sensible, and nonideological. The media have portrayed Brady as the weak link in the chain because he allegedly catches on slowly. But economic policy is not a footrace: It is more important to get the answer right than to get it fast. And the Secretary's decisions on S&Ls and LDC debt were pretty good ones in my book.

All this paints a picture of Bushonomics as carrying less ideological baggage and a greater attachment to reality than did Reaganomics. Yet the retrospectives filling the media in recent weeks complain that nothing much has happened in the first 100 days of the Bush Administration. My answer is: So what? In economic policy, haste more often than not makes waste. By rushing to react to an energy crisis that could have waited, President Carter proposed a multifaceted energy policy that may have done the economy more harm than good. Reacting to a nonexistent economic emergency, President Reagan hastily threw together an ill-conceived tax giveaway and a slapdash budget for which we are still paying.

President Bush, by contrast, has kept Chicken Little locked in the coop where he belongs. While America surely has economic problems, it faces no immediate crisis—and the Bush team has had the good sense not to create one. Its members seem to realize that the current situation calls for less shoot-from-the-hip and more think-with-the-head.

The greatest tests for the Bush Administration undoubtedly lie ahead. Given the nation's continuing addiction to foreign borrowing, an exchange-rate crisis cannot be ruled out. Whether the Administration will steer a course through the shoals of managed trade without sinking into protectionism remains to be seen. And the possibility of recession looms larger and larger. These and other events will test the Administration's economic mettle. But this longtime Democrat, for one, feels better about the prospects for the Bush Presidency than he did in November. ■

ALAN S. BLINDER IS THE GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON AND THE AUTHOR OF *HARD HEADS, SOFT HEARTS*

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ARE FATTER PIGGY BANKS MERELY AN ILLUSION...

After waiting years for Americans to curtail their excessive spending and save more, the stunning rebound in savings in recent months culminating in March's 6.3% personal savings rate has led some observers to declare that a turnaround in consumption behavior is at hand. A number of economists, however, warn that such a conclusion is decidedly premature. "Statistical distortions account for much of the recent rise in the savings rate, implying that it is

government counts the full purchase price of a car as a consumption expenditure even though most cars are bought on credit. As a result, "when auto sales weaken, reported consumer spending plunges and saving takes off."

In addition, Edward S. Hyman Jr. of C. J. Lawrence, Morgan Grenfell Inc. observes that hefty growth in interest income in the wake of rising interest rates over the past year has also boosted savings. "Most interest income is saved," he says, "particularly marginal increases in such income." Over the past 12 months, he notes, personal interest income has actually outpaced savings, growing by \$90.9 billion, compared with a \$74.8 billion rise in personal savings.

In short, it's probably too early to celebrate a savings revival. While consumers are clearly spending less of their incomes than in the past, the dramatic increase in the savings rate in recent months appears to be overstated.

IS THE SAVINGS SURGE WEAKER THAN IT SEEMS?



... OR DOES THE JUMP IN SAVINGS REFLECT A DEMOGRAPHIC SHIFT?

One economist who thinks the recent sharp rebound in the personal-savings rate is more fact than fiction is Edward E. Yardeni of Prudential-Bache Securities Inc. Long a proponent of the view that powerful demographic shifts are fostering a long-term increase in savings behavior, Yardeni thinks the latest numbers signal a healthy slowdown in consumption, which should allow the economy to grow at a more sustainable, less inflationary pace for years to come.

Almost a year ago, Yardeni began predicting that the aging of the baby boomers beyond their household-formation years, combined with the rising incomes that accrue to more mature workers, would result in a dramatic swing in the savings rate from its recent low of 3.2% in 1987 to a high of 10% by 1993. Even with the influence of special factors that boosted the savings rate in the first quarter and the impact of monetary restraint on spending, Yardeni thinks that scenario is still unfolding. "Sure, high interest rates are depressing home sales and consumption," he says, "but so are underlying demographics."

Looking ahead, Yardeni thinks those demographic trends will provide the groundwork for continuing growth. Rising savings by baby boomers, he says, will help finance a boom in capital spending. Moreover, the boom should last for years, as labor shortages related to the aging of the baby boomers spur business to enhance productivity by substi-

tuting capital for labor. And the speed in productivity resulting from the investment boom will enhance labor income and augment savings even more.

What about developing weaknesses in such vital industries as housing and autos? "Domestic capital spending, plus stronger exports aided by capital investment booms overseas, should keep the economy expanding despite slower consumption growth," says Yardeni.

TIGHTER S&L RULES COULD CURB CAREFREE CONSUMERS

One development that could dampen consumption and bolster savings over the next few years, predicts economist David Hale of Kemper Financial Services Inc., is new thrift industry legislation moving through Congress. Although thrift institutions will still be able to originate loans for resale, Hale notes that "higher capital requirements will make it difficult for nearly half of them to expand their loan portfolios during the next two years." Since thrifts account for 50% of all mortgage originations and own 40% of all outstanding mortgage loans, Hale believes that curtailment in their lending powers is likely to lead to higher mortgage rates even if money-market yields move sideways. "Such a squeeze," he says, "could help the Federal Reserve Board to slow the economy by depressing housing starts, weakening property values, and encouraging households to raise their savings rate in the process."

FERRETING OUT FRESH SIGNS OF A SLOWDOWN

The economy's reported first-quarter growth rate of 5.5% is likely to be revised down by a percentage point, predicts Michael Evans of Evans Economic Inc. The reason: Government economists assumed the trade deficit for March declined to \$9.3 billion from February's \$10.5 billion, whereas customs reports showing an import surge and other data suggest to Evans that the deficit actually rose by \$1 billion. The larger the trade deficit, of course, the more it subtracts from the gross national product. Excluding the effects of the farm sector on the economy's growth rate, Evans notes that the GNP revision he is predicting implies that nonfarm growth actually slowed from a 3.5% pace in the first quarter of 1989 to 2.5% last quarter.

Similarly, Charles Lieberman of Manufacturers Hanover Securities Corp.

One such factor is a dramatic pickup in government subsidy payments to farmers, whose income soared from a \$13.5 billion annual rate in November to an average \$60 billion annual rate in February and March. Sudden, large increases in farm income show up mainly as savings because they are not spent immediately and are not seasonally adjusted. By contrast, personal spending, including spending by farmers, is seasonally adjusted. While the personal savings rate in general has jumped by 2.4 percentage points since November, William V. Sullivan of Dean Witter Reynolds Inc. points out that subtracting farm income from the equation would leave an increase of only 1.2 percentage points (chart).

Similarly, Lieberman notes that the first-quarter decline in auto sales also



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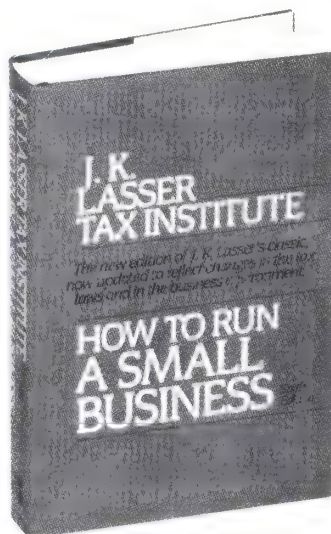


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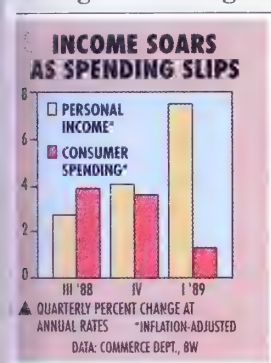
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SLOWER GROWTH? THE JURY STILL CAN'T REACH A VERDICT

The much-heralded economic slowdown might, in fact, be just a mirage. That's the message from the report on first-quarter gross national product. Real GNP, adjusted for the drought's impact, rose 3% last quarter, not much below the 3.4% average during the four quarters of 1988. Consumer spending did slow last quarter, but strength in business investment in equipment and an improvement in the foreign trade deficit took up the slack.

The second quarter will be the real test of whether growth is indeed slipping down to the 2.5%-to-3% range—or less—that the Federal Reserve Board wants to see. That cooler pace would help take away the heat under inflation and ease the upward pressure on interest rates, increasing the chances that the Fed can engineer a soft landing for this high-flying expansion.



But now that economic data for April are trickling in, the second quarter is starting to look sturdier than the Fed and the jittery financial markets might like. The purchasing managers' index for April recovered all of its March drop. Car sales rebounded modestly last month to an annual rate of 7.5 million, from 6.6 million in March. And after a brief rise, initial unemployment insurance claims have retreated again.

In addition, consumers may be set for a stronger showing this quarter. Since the second quarter of 1988, personal income growth, the most important determinant of consumer spending, has accelerated, even after accounting for inflation. Last quarter, the 7.5% annual rate of increase in real personal income far surpassed the meager 1.3% gain in real spending, giving consumers plenty of green for the current quarter (chart).

INFLATION PROSPECTS ARE STILL GLOOMY

True, signs of slower growth continue to show up in the March data, but there's a particular twist to the first-quarter numbers: January data were almost uniformly strong, while reports for February and March were generally weaker. This suggests that the first quarter's unusual weather may have as much to do with that slowdown as tight Fed policy. An exceptionally mild January brought out a lot of business activity that wouldn't normally have occurred, causing many numbers for February and March to pale in comparison.

The index of leading indicators, for example, fell for

the second consecutive month, down 0.7% following a 0.3% decline in February. It had risen 0.8% in January. Similarly, consumer spending last quarter also showed a pattern of early strength and later weakness.

Construction, however, is genuinely weak, mainly reflecting the impact of higher interest rates on homebuilding. Construction outlays, down 0.3% in March, to \$413.5 billion, lost ground for the third consecutive month. But even here, there are pockets of strength. Excluding a sharp drop in government outlays, private spending rose by a strong 1.8%, led by a 4.1% jump in business outlays, mostly for new industrial plants.

Even if the economy does cool down this quarter, reports on inflation will still look forbidding, particularly since hikes in energy prices will start showing up on top of the general acceleration in prices. In addition, poor productivity growth last quarter means that unit labor costs are still rising rapidly, pressuring prices even more.

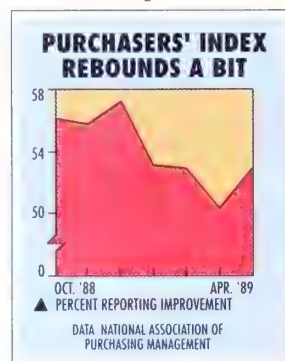
Productivity in the nonfarm sector rose at a slim 0.5% annual rate in the first quarter, following a 1% gain in the fourth quarter. So productivity gains have fallen woefully short of offsetting the speedup in wages and benefits. As a result, unit labor costs accelerated to a 5.2% annual pace last quarter, up from 4.1% in the fourth quarter and 3.6% in the third.

FACTORIES FEEL THE EXPORT SLOWDOWN

The factory sector, where productivity gains have been good—including a 3.8% advance in the first quarter—will continue to support the economy this quarter, but maybe less vigorously than before. The thrust from exports, a big part of last year's industrial strength, is waning. While weather gyrations no doubt influenced much of the first-quarter data, the export slowdown also played a role, especially in manufacturing.

The National Association of Purchasing Management's index of business activity—a composite reading of orders, production, employment, inventories, delivery speed, and prices for industrial companies—fell sharply last quarter. But it rebounded in April to 53%, recovering all of its March drop, suggesting that industry is in better shape than the March report implied (chart).

Still, the slowdown in exports is quite real. The GNP report showed that merchandise exports, adjusted for prices, grew a bit last quarter. But it was a rebound in



Business Outlook

farm exports, which dropped steeply in the third and fourth quarters because of the drought, that accounted for all of the speedup. Gains in real exports of nonfarm goods actually slowed last quarter. They rose at an annual rate of only 6.5%—the smallest quarterly gain in two years—down from 11.2% in the fourth quarter.

Slower export gains partly explain the recent increase in the ratio of manufacturers' inventories to shipments. Stock levels rose 0.5% in March, to \$360.9 billion, while shipments dipped 0.1%, to \$228.1 billion, pushing the ratio to 1.58. That's a sharp increase from 1.53 in December, but the ratio is still quite low.

CONSUMERS ARE DOWN, BUT MAYBE NOT OUT

Domestic consumers are still manufacturing's most important market. And the economy's second-quarter performance, in general, will turn on consumer spending. That was the source of what slowdown there was last quarter. Inflation-adjusted outlays rose at an annual rate of just 1.3% in the first quarter, a sharp drop from the fourth-quarter's 3.5% pace. Growth was weakest in the quarter's final month. In March, consumer spending rose just 0.2%, to an annual rate of \$3,390.5 billion. After price changes, spending fell 0.4% for the month.

Weak car sales, down 18.1% at an annual rate, were one reason for the first-quarter slowdown. But even excluding autos, real consumer spending rose at an annual rate of just 2% last quarter—and the slowdown was widespread. In March, none of the major spending categories—cars, other durable goods, nondurable goods, and services—posted an increase.

Such consumer caution is odd, given the sharp increase in incomes. In March, personal income advanced 0.8%, to an annual rate of \$4,349.7 billion. Adjustments to Social Security checks and bonus payments to autoworkers boosted the gain. But excluding these and other special factors, income still rose by a healthy 0.6%.

Nonfarm income rose a robust 0.9% in March, and

first-quarter growth was 10.1% at an annual rate. Rising interest rates and strong labor markets fueled the gain. Interest income grew at a phenomenal 20.8% annual pace last quarter, with wages and salaries up 9.4%.

Despite sturdy income gains, caution over interest rates and inflation may be playing a big role in consumer behavior. The University of Michigan's index of consumer sentiment has dropped for three consecutive months. April's 3% decline put it at its lowest level in a year.

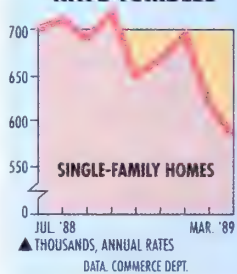
Rising interest rates have probably made consumers think twice before buying big-ticket items. Certainly higher mortgage costs have dampened housing demand. Sales of new single-family homes dropped 5.5% in March to an annual rate of 587,000, after February's 10.5% plunge (chart). Sales are down 11.7% from a year ago.

The second quarter doesn't look good for either homebuilders or their suppliers. At the end of last quarter, the stock of unsold houses was the highest in nine years. So demand for construction materials and furnishings this quarter will be weak. Already, home appliances and furniture are showing signs of weakness.

Rather than make big commitments, consumers salted away much of their first-quarter gains in income. Savings in March rose to an annual rate of \$234 billion, pushing the ratio of personal savings to after-tax income to 5.7% in the first quarter up from 4.3% in the fourth. Also, the Fed reports that financial assets held by households—including stocks, bonds, and bank deposits—grew by a strong 8% in 1988.

With their financial position so secure, consumers will probably shake off their first-quarter malaise. If they do, the economy could be a lot stronger this quarter than the Fed would like.

SALES OF NEW HOMES HAVE TUMBLLED



THE WEEK AHEAD

RETAIL SALES

Thursday, May 11, 8:30 a.m.

Retail sales probably increased by a strong 1.5% in April, reversing their recent weak performance. Sales rose by just 0.1% in March, after falling 0.6% in February. Slumping car sales caused most of the slowdown, although receipts were down at other retailers as well. A faster pace in new-car sales will boost the overall April rise. But other retailers, especially gasoline stations and apparel stores, should post strong gains.

PRODUCER PRICE INDEX

Friday, May 12, 8:30 a.m.

The consensus is that producer prices of finished goods most likely rose by about

0.7% in April. Sharply higher energy costs will account for much of the rise. Still, producer prices for other goods are also increasing more rapidly. In the first quarter, prices for finished goods grew at an 8.9% annual rate. Excluding the volatile food and energy components, prices were still up by 5.6%.

BUSINESS INVENTORIES

Friday, May 12, 10 a.m.

Inventories held at factories, wholesalers, and retailers probably grew by about 0.6% in March, after a 0.5% increase in February and a stronger 0.8% gain in January. Manufacturers have already reported their stockpiles grew by 0.5% in March. Inventories at car dealerships—pumped up by the slump in auto

sales—doubtless rose much faster. Other retailers may also be carrying an excess of goods. Inventories at nonauto retailers have grown at a 10.4% annual rate in the past three months.

BUSINESS SALES

Friday, May 12, 10 a.m.

Business sales most likely were unchanged in March. That follows a 0.9% drop in February and a 1.1% gain in January. The expected March flatness is indicated by the 0.1% fall in factory shipments and the 0.1% rise in retail sales. The weakness in sales, coupled with the expected growth in inventories, means that the ratio of inventories to sales will increase slightly from its level of just under 1.51 in February.

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WILL THE ALLIES LEAVE BUSH BEHIND?

DISCOURAGED WITH HIS SOVIET DIPLOMACY, THEY MAY YET GO THEIR OWN WAY

In the face of rising pressure at home and abroad to respond in kind to Soviet leader Mikhail S. Gorbachev's peace overtures, George Bush has a ready answer: "Not yet." But to America's increasingly dovish European allies, it sounds as if the President is saying "nyet" to their hopes for a fast easing of East-West tensions.

That's precisely why the pressure will be on Secretary of State James A. Baker III on May 10-11 when he makes his maiden voyage to Moscow. The allies are sure to find Baker's mandate disappointing. The biggest thing likely to come out of the meetings is a date for resuming the strategic arms talks. And that's unlikely to dispel the Europeans' notion that Bush plans a more cautious approach to warmer U.S.-Soviet relations than did President Reagan during his last months in office.

SYMBOLISM. Neither Bush nor Baker sees any reason to give in to the European clamor to move faster. Baker dismisses most of Gorbachev's peace gestures as largely symbolic. "What's important is that the Western alliance is winning with substance," Baker said in a wide-ranging interview with *BUSINESS WEEK*. "We're winning politically. We're winning economically. Overwhelmingly. And we need to stick to what's worked."

But many allies fear that by taking such a hard line, Baker and Bush are missing a historic opportunity to recast the East-West relationship. Gorbachev's "new thinking" has opened the possibility of reaching major agreements—for example, to scale down conventional armed forces. And "there is no reason to

suppose that agreements entered into with his government, under his leadership, would not, if properly negotiated and formalized, be respected by his successors," veteran Soviet expert George Kennan recently told Congress. But there is no guarantee that another leader in the Kremlin would be as open as Gorbachev to fresh approaches.

The opportunity Bush critics spot is founded on Moscow's turn inward to cope with a crumbling economy. That has given Europeans hope that Moscow

no longer has military designs on the West. "There's a great danger for the U.S. in this slowness to define policy," says Philippe Moreau Defarges, a consultant at the French Foreign Relations Institute. "All Europeans want to believe the Gorbachev experiment."

But the best news the Europeans can expect is that Baker and Soviet Foreign Minister Eduard A. Shevardnadze are likely to agree on a date for the resumption of Strategic Arms Reduction Treaty (START) talks in Geneva and perhaps on



Bush will need more than clever rhetoric to counter Gorbachev. NATO allies and doves back home are pressing for arms cuts in Europe



Bush-Gorbachev summit for later in the year. Baker is positioning the U.S. for arms negotiations by suggesting that the Administration has all the time in the world. As one Administration policymaker puts it, "START is much higher on the Soviets' list of priorities than it is on ours."

POLITICAL TIMETABLE. Bush strategists feel that most of the pressure for cuts is coming from the Soviet side because Gorbachev needs to cut back his country's enormous spending on strategic weapons. And the START slowdown could mesh nicely with Bush's political timetable. A treaty signed closer to 1992 can't help but boost his reelection prospects.

Baker has no intention of limiting the discussions in Moscow to strategic arms. He will emphasize the need for progress in regional conflicts in Nicaragua, the Middle East, and Africa as a way to test the substance behind Soviet rhetoric. "We think regional matters are particularly important," Baker says. "They give us an opportunity to probe and explore the so-called 'new thinking' which the Soviet Union has talked about."

Gorbachev's "new thinking" includes rejection of military solutions to regional problems. Moscow has backed out of its costly engagement in Afghanistan

and has promised to pressure Vietnam to end its occupation of Cambodia. But Administration officials complain that Moscow is limiting its military pullbacks to areas where the Soviets have been frustrated. So far, there's no evidence of wholesale Soviet withdrawals from Nicaragua, Syria, or Libya.

In Nicaragua, the Bush Administration says the Soviets should respond to

Baker has no intention of limiting the discussions in Moscow to strategic arms

the U.S. cutoff of military aid for the *contras*. "For starters, we would like to see them stop funneling \$515 million per year into Nicaragua in military aid," says Baker.

Underlying this thinking is the U.S. conviction that Soviet economic woes will force Gorbachev to go on making most of the concessions. To encourage such good behavior, most Bush aides are prepared to dangle the prospects of

more Western trade and fewer export controls. But some Administration officials are so downbeat about Gorbachev's chances of success that they see no need to offer enticements. Defense Secretary Richard B. Cheney recently was chastised by Bush for publicly predicting that Gorbachev will be replaced by a more hardline regime.

Right now, the Europeans have no taste for such pessimism. The Germans, in particular, are willing to provoke a crisis within NATO to press their case for removal of nuclear arms from Europe. First, Bonn resisted a U.S. proposal that short-range nuclear missiles be modernized, a dispute that Washington thought it had finessed. Then, Chancellor Helmut Kohl, fighting for his political life, upped the ante by calling for talks with Moscow to reduce the weapons. Germany's ruling coalition "is panicked," says a U.S. diplomat. "Domestic politics should not dictate alliance strategy."

'GOOD RHETORIC.' This dispute is unlikely to be resolved before Bush flies to Brussels for a NATO summit in late May. He had hoped to use his first European trip to celebrate 40 years of allied unity and debunk Gorbachev's calls for a "Common European House" in which U.S. influence would be reduced. "Gorbachev's vision is good rhetoric, but it's not much else," charges Baker. "How can you talk about a 'common European house' when barbed wire, watchtowers, and walls mean people cannot move from room to room?" Gorbachev will have a platform to address that question during a visit to Bonn June 12-15.

Baker and Bush will need more than clever rhetoric to counter Gorbachev both in Europe and at home. In Washington, a coalition of congressional liberals and conservatives wants to withdraw up to 17,000 U.S. troops from Europe, 5% of its total, and to go deeper than the cuts proposed by NATO in the conventional-arms talks.

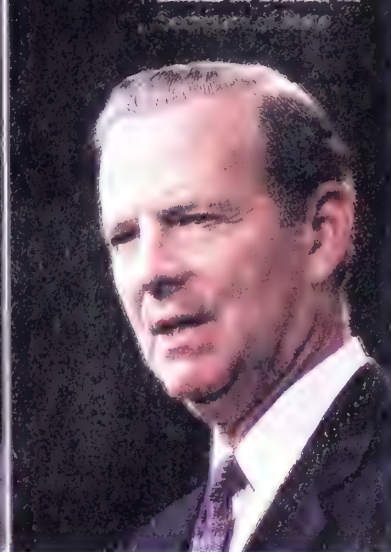
Unfortunately for the ever-cautious Bush, the East-West agenda is moving much faster than the new Administration seems willing to go. Unless he can quickly persuade Europeans that he has the vision to lead NATO into a new era of superpower relations, the allies are unlikely to wait for Washington.

By Bill Javetski and Dave Griffiths in Washington, with Stewart Toy in Paris and bureau reports



'What's important
is that the
Western alliance is
winning with
substance . . . And
we need to stick
to what's worked'

— JAMES A. BAKER III



GETTING TOUGH WITH TOKYO: BUSH TALKS A GOOD GAME

Will he really follow through and crack down on Japan?

The White House has finally given U.S. manufacturers, Congress, and the Japanese the signal they've been waiting for. On a long series of pending trade disputes with Tokyo, the Bush Administration intends to be a much tougher bargainer than the Reagan White House.

On Apr. 28, the Administration threatened retaliation against Japanese makers of computers, portable phones, cosmetics, TV cameras, tape recorders, and other exports. The same day, the White House won concessions from Tokyo on production of a new fighter airplane and published an extensive list of global trade barriers that highlighted Japan's offenses. "We are feeling our way and breaking new ground," says former Commerce Dept. official Clyde V. Prestowitz, an outspoken critic of Washington's cautious approach to Japan.

There were early signs that the Administration's seeming show of resolve would produce some concrete, commercial results. Despite grumbling from the Foreign Ministry, Japanese companies moved quickly to quiet the discord by suggesting a new willingness to resolve some old disputes. NEC Corp. said it was considering the use of American computer chips in its new line of supercomputers. Nippon Motorola Ltd. hinted that U.S. companies would get broader access to the Japanese market for cellular telephones. And International Trade Minister Hiroshi Mitsuzuka, in Washington for talks with U.S. officials, suggested that American chip makers could help develop chips for Japanese high-definition television.

For these peace offerings to amount to anything, of course, depends as much on Administration follow-through as it does on Japanese goodwill. In a series of talks, Washington must keep the pressure on Tokyo.

STICK AND CARROT. On Capitol Hill, too, the Bush approach played to favorable reviews. Senate Finance Committee Chairman Lloyd Bentsen (D-Tex.) noted "a more aggressive" approach by Commerce Secretary Robert A. Mosbacher and U.S. Trade Representative Carla A. Hills. The attention brought one Administration official to exult that the "leave Japan alone" ethic of the Reagan era had been replaced by the Bush crew's



**TRADE REPRESENTATIVE HILLS: JAPAN HAS
"FAILED TO LIVE UP TO ITS COMMITMENTS"**

"engaged, informed decision-making."

The Administration didn't pull any punches in its 214-page report to Congress on trade barriers. It cited Japan for barriers to U.S. tobacco, leather, wood and paper products, wheat, rice, fish, telecommunications equipment, pharmaceuticals, optical fibers, auto parts, soda ash, and supercomputers. The next step: choosing priority countries and practices for negotiations. "We will act as a surgeon using a scalpel to remove these trade barriers," Hills told

a congressional panel on May 3. If the talks fail, the law orders retaliation.

The fighter jet deal marks a turn in U.S. policy. In past arms deals, military and diplomatic considerations overrode economic concerns. But after congressional critics' outcries, the White House negotiated new terms under which Japan will use General Dynamics Corp.'s technology to develop its FSX fighter. The old deal called for GD to do 40% of the development. Bush won a promise of a "similar" U.S. share of actual production.

'A BAD DEAL' Meanwhile, Washington got assurances that new Japanese radar and wing improvements will be shared. Although Representative Richard A. Gephardt (D-Mo.), a leading trade hawk, called the aircraft pact "an attempt to dress up a bad deal," it appears unlikely that Congress will block it.

Telecommunications appears to be far tougher issue. Responding to another provision of the new trade law, Hills said Japan has "failed to live up to its commitments" under a 1985 agreement to boost U.S. sales of communication gear. Without quick Japanese concessions, retaliation must follow within, and most likely in sooner than, 18 months.

Rather than complain, however, even pragmatic Japanese executives set about trying to patch things up. Some even admitted the U.S. has a good case. Despite the 1985 pact, U.S. telecommunications equipment makers won just 2.4% of the Japanese market in 1988, hardly up from a 2.1% share in 1986 and 1987.

During the Reagan era, the White House had to be pushed hard to take even the most tentative steps to rebuke the Japanese. Bush appears more willing to crack down. But the key remains the Administration's willingness to make good on its threats of retaliation.

By Paul Magnusson in Washington, with Neil Gross in Tokyo

FUSION

HAS THE GENIE ESCAPED FROM THE FUSION BOTTLE?

The Utah experimenters miscalculated, say a crowd of critics

After six weeks of feverish activity, the scientific jury came back in and delivered a devastating blow to claims that two chemists had discovered fusion in a test tube. "Let me walk you through this," chemist Nathan Lewis from California Institute of Technology told a rapt audience of 1,800 scientists at a special session of the American Physical Society conference in

Baltimore on May 1. "I guarantee that you will be shocked."

Lewis and a parade of other scientists charged that chemists B. Stanley Pons of the University of Utah and Martin Fleischmann of the University of Southampton had made fundamental errors in their experiments that led them to believe they had discovered a new form of nuclear fusion. "The experiment is just

rong," California Institute of Technology theoretical physicist Steven E. Moseley told the scientists. The University of Utah results, he said, stem "from the incompetence and perhaps delusion of Pons and Fleischmann."

Strong words for a scientific forum, and they brought gasps from the assembly. But the attacks also reflected the mounting evidence against Pons and Fleischmann's claim that their bottle filled with heavy water produced far more energy than it consumed. While some scientists still think it worthwhile to continue trying the experiment, researchers from Oak Ridge National Laboratory, Lawrence Berkeley Laboratory, the University of Rochester, and Massachusetts Institute of Technology announced at the meeting that they were unable to duplicate Utah's results.

DIR WELL. In fact, some scientists found mundane explanations for the startling findings claimed by Pons and Fleischmann. One presumed indicator of fusion—the experiment, for example, was the production of neutrons. The duo measured these particles indirectly by corraling gamma rays, which they thought were produced when neutrons generated by fusion collided with the water surrounding the experiment. But researchers from MIT said that the gamma ray signals were faulty instrument readings.

A team from Caltech took aim at the Utah laboratory's most spectacular claim—that the table-top apparatus produces up to 10 times more energy than it consumes. After poring over Pons and Fleischmann's results and conducting their own experiments, the Caltech group discovered that the claims were based on faulty assumptions by Pons and Fleischmann. Caltech maintains that the two miscalculated the amount of heat the experiment generated and underestimated the amount of power that was being put in.

Even more damning, said Caltech's Lewis, was Pons and Fleischmann's apparent failure to stir the heavy water in their bottle. Caltech's scientists found that without such agitation, one side of the bottle becomes warmer, skewing the measurements.

How is the Utah duo doing after all is pummeling by their peers? They have declined to comment, saying that they will offer a rebuttal at a meeting on May 8. "There isn't a feeling that the house is collapsing around everyone's ears," insists colleague Cheves Walling, a Utah chemist. But the visions of unlimited, cheap energy from test-tube fusion are fading fast. Says physicist Kelvin G. Wilson of Brookhaven National Laboratory: "A lot of physicists walked away from the meeting feeling that there wasn't a lot of hope left."

By John Carey in Baltimore

THE LAW

WALL STREET IS GLUED TO THE BILZERIAN TRIAL

The crucial question: Will the jury buy Boyd Jefferies' testimony?



BILZERIAN: ACCUSED OF STOCK "PARKING"

Boyd L. Jefferies has spent the past weeks in Aspen, Colo., skiing when he can. But his lawyer, James P. Lynn, insists that the founder of Jefferies & Co., who's set to be sentenced July 6 for securities crimes, "hasn't been having any fun." Already this year, Jefferies has endured grueling cross-examinations as a government witness in two stock-manipulation trials of GAF Corp.

Now, with the May 1 opening in New York of the feds' case against raider Paul A. Bilzerian, Jefferies once more is headed for the hot seat. He could be called to the stand by May 8 to spill what he knows about Bilzerian's alleged crimes. Based largely on information from Jefferies, Bilzerian faces 11 counts of securities and tax fraud and other crimes. If convicted, he could face up to 55 years in prison and millions in fines.

The charges depict the Tampa-based chairman of Singer Co. as a freewheeling takeover artist who illegally amassed millions in 1985 and 1986 from unsuccessful raids on Cluett Peabody, Hammermill Paper, and H. H. Robertson, and from an undisclosed investment in Armco Steel. Prosecutors allege that Bilzerian, through Jefferies' firm, secretly accumulated big stakes in his targets, concealed his ownership of the shares, and misrepresented how he got the mon-

ey to buy them. Bilzerian has pleaded innocent. "I expect to be vindicated," he said when indicted last December.

The case is important to Wall Street because it's a fresh advance in the government's war on market corruption. Those involved in the case and other lawyers believe it to be the first criminal trial over a stock "parking" deal, an illegal scheme to conceal stock ownership.

CLOSE WATCH. Bilzerian's trial could be the first of the cases involving Jefferies and jailed arbitrageur Ivan F. Boesky that results in a jury verdict, since the two GAF trials ended in mistrials. How the Bilzerian jury comes down will be closely watched, for there remain a third GAF trial, set for November, a September stock-manipulation case against Wall Streeter Salim B. Lewis, which also features Jefferies, and the trial next year of Drexel Burnham Lambert Inc. junk-bond chief Michael R. Milken, in which Boesky will be a star witness.

Of the cases involving Jefferies, the one against Bilzerian looks like the government's best shot, say defense lawyers. Since it's the only one claiming that the accused personally profited from his alleged crimes, it will be easier to establish motive—a key to winning over a jury. The indictment is also broader, covering a pattern of transactions, while the GAF and Lewis cases essentially allege one-shot crimes. And prosecutors expect to corroborate Jefferies' account through witnesses and copies of false filings and telephone tapes.

True, as in GAF, the prosecutors will be hampered by the complexity of the allegations. Yet it will probably be the defense with the stiffer challenge. In court papers, Bilzerian's lawyers argue that the charges seek to criminalize conduct that wasn't viewed as criminal as it occurred and lacks "traditional hallmarks of criminal behavior." The lawyers also claim the case is an unprecedented attempt to justify Jefferies' plea bargain, which let him shield his firm as he admitted two lesser felonies.

But even if the defense badly damages Jefferies' credibility, the prosecutors think they still can win the jury. For his part, Jefferies is anxious to get on with his life and put the hundreds of hours he has spent as a government mole behind him. This year, though, Jefferies works for the prosecutors.

By Michele Galen in New York

AIRLINES



AT UAL HEADQUARTERS: SHOWING THE FLAG FOR HIGH-FARE PACIFIC DESTINATIONS

UNITED SWALLOWS HARD—AND GOES FOR GROWTH

But its high labor costs give rivals American and Delta an advantage

Even in an industry where multi-billion-dollar plane orders have become as common as air traffic delays at O'Hare International Airport, UAL Corp.'s Apr. 26 announcement that it will buy 370 Boeing Co. jetliners worth \$15.7 billion was big news. But behind the headlines trumpeting the largest single commercial jet order ever lies a more sobering story: Chairman Stephen M. Wolf is now on the defensive in his behind-the-scenes scramble to lower labor costs at United Air Lines Inc.

This buying binge is a dramatic turnabout for Wolf, who had vowed to delay vigorous growth at the Chicago-based carrier until workers agreed to enough wage or work-rule concessions to lower United's costs nearer those of archrival American Airlines Inc. The delay allowed fast-growing American last year to fly past United to become the non-communist world's biggest carrier.

BIG TWO? Wolf had little choice but to abandon this game of chicken. United's unions have held out longer than expected in labor talks: Its pilots' contract has been open for renegotiation since last spring, while the flight attendants' accord has been unsettled since 1987. Both are under federal mediation. Meanwhile, rivals American and Delta Air Lines Inc. are both growing at roughly triple United's pace. "If we don't act," Wolf warns,

"it's not going to be the Big Three [airlines] anymore. It will be a Big Two."

Yet Wolf's flight plan could go awry. United's cost disadvantage to American of ½¢ per seat-mile seems small, but Wolf figures it means about \$500 million in operating earnings. So Wolf has been demanding union productivity gains. But by announcing a big plane order before contract talks are completed, Wolf could lose bargaining leverage with union pilots, who stand to gain higher-paid jobs as captains as the fleet grows. "There's risk to this," Wolf admits, "but we need something concrete to unilaterally demonstrate to the pilots that we are committed to growing the airline."

United's unions believe that prior UAL management, by eschewing airline growth in favor of the acquisitions of Hertz Corp. and the Hilton International Co. hotel chain in the mid-1980s, squandered a chance to cut its labor costs sharply. The United flight attendants'

"There isn't anything they can do to convince us that we should cut our wages or make our work rules worse"

union in 1983 and the pilots' union in 1985 gave management the right to hire new employees at sharply lower "T-scale" rates. Under similar schemes, rivals American and Delta aggressively added planes and B-scale employees—with each new worker reducing the carriers' average wage cost.

MISSED CHANCE. But United's no-growth stance has left it with only about 25% of its flight attendants on lower pay scale next to roughly half at American, union officials say. Now, with industrywide traffic booming and once-ailing UAL logging record net income of \$1.1 billion in 1988 and a 134% jump in 1989 first-quarter earnings from continuing operations, the unions say United management has missed the opportunity for concessions. "In two consecutive contracts, we gave concessions to the company, and we received nothing in exchange except seeing our company lose 25% of our market share," says Captain Jim Damron, spokesman for the Master Executive Council of the pilots' union. "They took that economic leverage and used it to buy hotels and rental cars." Adds blunter Pat Friend, president of the Association of Flight Attendants at United: "There isn't anything they can do to convince us that we should cut our wages or make our work rules worse."

Such resistance has all but quashed Wolf's hope of erasing United's cost gap with American. Instead, Wolf now is pushing to narrow that differential simply by easing work rules and lowering United's financing costs, while besting American's per-seat revenue by selling more high-fare tickets.

Crucial to that higher-fare strategy will be United's extensive network over the Pacific and in Asia, which sports some of the world's highest fares. United's Pacific system already accounts for 20% of its total revenue and a third of its operating profit. And margins there are roughly 50% higher than for its domestic system. So Wolf this year will boost Pacific capacity by 25% as he takes delivery of the first of 15 Boeing 747-400s. Also, another United order expected by yearend for more widebodies will allow even more trans-Pacific flights. And he's wooing high-fare business fliers in the U.S. with new, convenient terminals at United hubs in Denver and Chicago.

Yet it remains to be seen if Wolf can wring out any real productivity gain short of giving employees a piece of the company—something pilots long have wanted. And a possible recession could soften fares, making Wolf's strategy tougher to pull off. United may be growing again, but the heavy baggage from its no-growth years hasn't been lost.

By James E. Ellis in Chicago

RAIDERS MAY NOT MAKE THE BEST AIRLINE PILOTS

At first glance, the struggle for NWA Inc., parent of Northwest Airlines Inc., appears to be just another acquisition battle in the rough-and-tumble airline industry. After all, since 1979, when Pan Am Corp. bought National Airlines, more than a dozen carriers have succumbed to takeovers.

Yet with the notable exception of Carl C. Icahn and Trans World Airlines Inc., all the major airline deals have involved one carrier gobbling up another, as industry rivals maneuvered to build up critical mass of planes, routes, and gates. Even Icahn built up TWA with his purchase of Ozark Air Lines Inc.

AIR GAME. This time, though, there are no airlines among Northwest's known suitors, who now include billionaire Marvin Davis and a group headed by Beverly Hills financier Al Checchi. Even Kohlberg Kravis Roberts & Co., the leveraged buyout firm, might jump in.

A successful takeover of Northwest could signal more dealmakers outside the industry that other major carriers, such as USAir, UAL, and Delta, are fair game. Like Northwest, these airlines have lots of borrowing power, valuable franchises, and plenty of undervalued assets. In other words, some of the nation's biggest airlines, after surviving a decade of wrenching change, could become fodder for Wall Street's leveraged buyout specialists.

Yet is this a good idea—for either the airlines or their would-be acquirers? Probably not. True, a wave of LBOs in the industry would certainly boost the carriers' stock prices, which had traditionally traded at low price-earnings ratios. And some of the outsiders might be adept at building business through financial stratagems. Checchi, for example, worked at Marriott Corp., where he helped devise a successful strategy of selling hotel properties to investors and then managing them.

But consider the cautionary example set by Icahn and TWA. Icahn has surprised the industry by boosting operating profits substantially, generating a hefty annual cash flow of more than

\$400 million, and placing a big order for new Airbus Industrie jets. He has also been adept at borrowing against his fleet, or selling off planes and leasing them back. If Icahn can run TWA, the argument goes, why can't other raiders run airlines?

Icahn's showing, however, may not be easy to replicate. "Icahn got big wage concessions from the unions," de-

\$30 million. Icahn says that TWA is a lot stronger than it appears because it has more than \$1 billion in cash and plenty of attractive routes. In any event, TWA remains heavily laden with debt.

Even without the tons of debt a wave of LBOs would create, the entire airline industry has been rapidly going into hock. Many of these new obligations come in the form of aircraft oper-

ating leases, whose costs never show up on the balance sheet (chart). Instead, they wind up buried in the footnotes to financial statements. On balance sheets or off, though, the airlines are still obligated to make good on these leases.

While the level of airline debt has been changing, many of the industry's fundamentals have not. Airlines remain sensitive to changes in the economy, and their earnings are bound to drop in the next recession.

American airlines also must keep replacing old

planes through outright acquisition or leasing. A recent study by McDonnell Douglas Corp. estimates that from now until the year 2002, U.S. carriers will need approximately \$109 billion worth of new aircraft. Even as its need for capital reaches record highs, the airline industry this year should make only about \$3 billion in operating profits, even with higher fares.

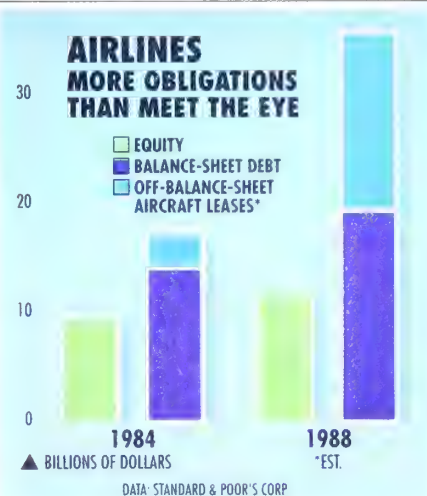
HIDDEN RISKS. Then, too, there are the peculiarities of the day-to-day business. "A 1¢ change in price per gallon of jet fuel means \$15 million to \$20 million in operating profit" at Northwest, points out Steven G. Rothmeier, chairman of NWA. Throw in the threat of terrorism, labor demands for wage hikes, new FAA safety rules, and tougher global competition, and airlines, as candidates for pricey LBOs, appear to be a lot riskier than, say, food companies or cigarette makers.

These perils will probably fail to deter financiers who are hungry for more deals. But if they're not careful, they may discover that the thrill of owning an airline can turn them a sickly shade of green.



clares Phillip Baggaley, an airline bond analyst at Standard & Poor's Corp. "I don't think Davis could get those at Northwest." In addition, Icahn has enhanced TWA's net earnings and cash balance with his own shrewd investments in Texaco Inc. and USX Corp.

And, TWA under Icahn has yet to be tested by a severe recession. TWA, which went private last fall, has more than \$2.4 billion in debt and lease obligations. Net worth is negative by some





ROMAN COULD CITE CONFLICTS OF INTEREST IN THE AGENCIES' SIMILAR CLIENT LISTS. SORRELL SAYS HE WOULD KEEP THE BUSINESSES SEPARATE

THE 'FAX ATTACK' THAT HAS OGILVY FUMING

It's enlisting clients and jawboning London brokers to deflect WPP

Madison Avenue is gearing up for another nasty fight. After weeks of rumors, Martin Sorrell, chief executive of London-based WPP Group PLC, finally took steps toward acquiring Ogilvy Group Inc., parent of the sixth-largest U.S. ad agency.

Sorrell insists the letter he faxed to Ogilvy Chairman Kenneth Roman on Apr. 28 isn't an official offer, just a friendly proposal pointing out the synergies between the two companies. Roman, though, sees nothing friendly about it. He immediately fired off a snippy letter to Sorrell and issued a press release making it clear he intends to fight the proposal to the end. Roman can count on the backing of founder David Ogilvy, 77, who has called Sorrell "an odious little jerk" in print.

CROSSFIRE. A fight won't faze Sorrell. The 44-year-old former Saatchi & Saatchi PLC finance director was responsible for the first hostile takeover in advertising: the \$566 million acquisition of J. Walter Thompson two years ago.

Meanwhile, clients are caught in the crossfire. At least 10% of the combined company's business would be affected by conflicts, says Chris Akers, an analyst with London-based Citicorp Serimgeour Vickers. Bell Atlantic Corp. and Eastman Kodak Co. are both JWT clients, while Ogilvy creates ads for American Telephone & Telegraph Co. and Polaroid Corp. Ogilvy also serves Duracell Inc.,

which competes with Kodak's battery business. "We bring agencies in during new-product development," says William H. Michie, Kodak's deputy director of marketing communications. "That's what makes this situation so difficult."

In addition to facing potential conflicts, clients are getting dragged into the scuffle. Ogilvy has encouraged clients to speak out against the deal in hopes that this will dissuade Sorrell from pursuing his proposal. "If WPP were successful in buying and dismantling Ogilvy, we would have to review our account," says Edgar Bronfman Jr., executive vice-president for U.S. operations at Joseph E. Seagram & Sons Inc.

Sorrell insists that he would run the two agencies autonomously, eliminating any conflict problems. But in the States at least, Sorrell isn't known for his hands-off management style. His disputes with principals at J. Walter Thompson's subsidiary, Lord, Geller, Federico, Einstein, caused a massive walk-out and the ultimate loss of the prestigious IBM account. At JWT, Sorrell instituted strict financial controls and deep cost cuts. The moves helped boost the agency's dismal 4% operating margin up to the industry average of 10%. Sorrell says that Ogilvy's 7.9% margins leave room for improvement, implying he would cut costs at that agency, too.

But critics say too much emphasis on the bottom line in an industry built on

image can hurt agencies in the long run. When Sorrell sold Thompson's Tokyo building to cut WPP's debt in half, industry sources say, the Japanese took the sale as a sign that JWT wasn't serious about doing business there. Thompson has had trouble winning local accounts ever since.

BATTLE OF BRITAIN. Wall Street, which has dubbed Sorrell's overture "the fax attack," is expecting competing offer. Ogilvy stock jumped 55%, to 49%, in the three trading days after Ogilvy made the proposal public on Sunday, Apr. 3. Such agencies as Interpublic Group of Cos. and Omnicom Group have been rumored as white knights.

If Sorrell really wants to win Ogilvy, say analysts, WPP will have to pay as much as \$60 a share, or about \$900 million, well above the \$45 opening offer. To finance the all-cash acquisition, Sorrell plans to take out a bank loan and sell a new equity issue, probably in the form of convertible preference shares to avoid diluting WPP's stock.

Roman is carrying his fight to Sorrell's home turf. Shortly before he received Sorrell's letter, Roman met with the London financial community to reiterate his determination to stay independent. Ogilvy also recently hired a London-based investment banking firm as a public-relations company. Roman's object is to make it harder for Sorrell to secure financing in the City. WPP's share price won't make Sorrell's task any easier: On London's stock exchange, WPP shares fell 10.8%, to 10¼, after the fax attack was made public. But whether the battle is fiercest in New York or in Britain, the clients fear that they're the ones who will be bloodied.

By Walecia Konrad in New York, with Mark Maremont in London

A SIP OF STROH'S COULD TURN INTO A GULP

The brewer wants a minority partner—but it may get swallowed instead

In one of Stroh's new ads, designs for a new beer can shift in and out of view as three voices argue over which color can be best. Abruptly, a fourth voice interjects: "Blue." Asked who this is, the voice identifies itself as Peter W. Stroh, chairman and CEO. Then the ad's creator, Hal Riney of San Francisco-based Hal Riney & Partners, intones: "Stroh's. The only major brewery in America where the family still makes all the decisions."

True, Stroh Brewery Co. is family-owned. But how much longer? After 139 years of launch independence, Stroh is succumbing to competitive heat. "The family always had an idea of going it alone," says Stroh President Roger Fridholm. "But there's a growing realization that's not feasible."

Stuck in a volume game, the Detroit company has asked Morgan Stanley & Co. to find a foreign brewer to chip in as a minority partner. One candidate: G. Heileman Brewing Co., a unit of Australia's Bond Corp. Holdings Ltd. Heileman President Murray Cutbush says Bond representatives huddled with Stroh officials in Detroit on Apr. 27. But while Stroh hopes for capital and global reach will get it going, industry watchers wonder if only a piece of the No. 3 brewer is enough. "No one's going to go for a minority deal," says one source close to Stroh. "I think it will be all or nothing."

D MIX. The reason: Stroh is a big risk. Heuser-Busch Cos.' 41% share of the market creates efficiencies that allow it to roll over its rivals. Only Miller Brewing Co., the No. 2 U.S. brewer, has posted volume in the past five years, and that with the considerable might of parent, Philip Morris Cos. No. 4olph Coors Co. has done it, but only spending heavily to open new markets—not by selling more on old turf.



PRESIDENT FRIDHOLM: HE SAYS THE COMPANY HAS TROUBLE RIDING OUT PRICE WARS

Stroh, meanwhile, has floundered. From a peak of 13% in 1983, its market share dropped last year to 10.7% on a volume of 20.4 million barrels, according to industry newsletter *Beer Marketer's Insights* (chart). Stroh doesn't release earnings, but revenues in 1988 rose a scant 1%, to \$1.4 billion. Moreover, its product mix spells trouble. Old Milwaukee, a blue-collar brand, dominates sales, while premium brews such as Stroh's and Stroh's Light are declining. Just 30% of Stroh's volume comes from high-margin products, compared with 85% at Anheuser and 80% at Miller.

Much of Stroh's trouble stems from its tapping a \$340 credit line to buy Milwaukee's Jos. Schlitz Brewing Co. in 1982—sapping its financial strength just as Anheuser and Miller were turning up the heat on the marketing front. The company also made some gaffes. A

hasty attempt to force its Stroh's brand into national distribution through Schlitz's network flopped. And when Stroh tried to revive sales of Stroh's and Stroh's Light with a "bonus pack" that put 15 beers in every 12-pack and 30 in every case, volume of the brand skidded 16.3%. "It cheapened the product," says Chicago wholesaler Jack Glunz. The new ads subtly poke fun at the former bonus beers by showing off new 6-packs, 12-packs, and 24-packs, plus an "11,000-pack," a big Stroh truck.

PILING ON DEBT. Just as the Schlitz debt was finally whittled down, Stroh piled on more. Last year, it launched national distribution of a sparkling-juice product called Sundance. And in January, the company bought rights to California Cooler, an ailing wine-cooler brand, from Brown-Forman Corp. Nonbeer products now make up 7% of sales, but making them a hit will be expensive.

Ditto for beer. Fridholm says the company has trouble riding out price wars and periods of slow sales, which are frequent in the industry. Foreign capital would help and maybe even give Stroh some export markets. In return, Stroh offers access to the world's largest beer market. A foreign brewer could sell its brands through Stroh's distributors and use Stroh's undertapped breweries. But success in brewing foreign beers in the U.S. is unprecedented, and a trickle of volume is hardly worth it.

Stroh won't name them but says it has seven browsers—including Bond's Heileman unit. Bond bought Heileman in 1987 for \$1.3 billion and is still trying to halt sliding volume at the No. 5 U.S. brewer. Sidney M. Oland, president of Labatt Brewing Co. in Toronto, took a look but then backed out. After buying Pennsylvania's Latrobe Brewing Co. outright in 1987, Oland says he wasn't interested in a minority stake in Stroh. Roy D. Barry, an analyst at Kidder, Peabody

& Co., speculates that Stroh may also be talking to Australian John D. Elliott, head of Elders IXL Ltd. But Elliott stumbled badly when he bought Carling O'Keefe Breweries of Canada Ltd. for \$300 million in 1987, with the aim of flooding Canada and the U.S. with his Foster's Lager.

Oland thinks Stroh is "loosening up a bit" on its demand for keeping majority ownership. Competing in the U.S. market is no happy hour. And a partial stake in a troubled company isn't a big selling point. In the end, the minority partner in this deal may just end up being Stroh.

By Dave Woodruff in Detroit, with Chuck Hawkins in Toronto



RETREAD IV: RETURN OF THE SON OF SEQUEL

How the studios hope to relive their greatest hits this summer

Things at Columbia Pictures Entertainment Inc. haven't gone better with Coke. The studio has had four different chiefs and has lost market share since Coca-Cola Co. bought it in 1982. Columbia had the worst record of any major distributor in 1988, capturing only 3.5% of the \$4.5 billion in U.S. ticket sales, and there has been little improvement so far this year (table).

Why, then, is studio President Dawn Steel so confident that Columbia will have what she calls "an awesome summer"? Quite simply: *Ghostbusters II*. The original film grossed \$220 million for Columbia in 1984, making it the fifth-biggest moneymaker of all time. And the early buzz in Hollywood suggests that the sequel will be one of the year's biggest hits. "The movie will do huge business," says John N. Krier, president of Exhibitor Relations Co., which helps theater owners predict how new films will fare. "But it's going to have plenty of competition."

BOND IS FOREVER. From what? You guessed it—sequels. In all, there will be eight this year. That's the same number as 1988, but this year they follow far bigger hits. Columbia has a lot riding on the strategy: In addition to *Ghostbusters II*, it will release *The Karate Kid III*. The second *Karate Kid* is Columbia's only other film since 1984 that made over \$100 million at the box office.

Paramount will keep its title as king of the sequels with three entries, including a likely smash, *Indiana Jones and the Last Crusade*. The third Indiana Jones adventure from George Lucas and Steven Spielberg will be released on Memorial Day weekend—one of the hottest moviegoing periods of the year. The two previous "Indie" flicks are the seventh and eighth biggest hits of all time. Paramount is also launching *Star Trek V: The Final Frontier*, and the eighth of its *Friday the 13th* horror spectacles.

Hollywood's other top guns are loaded with sequels, too. Warner Brothers Inc. has *Lethal Weapon 2*, an update of its violence-laced 1987 hit. MGM/UA Communications Inc. will trot out its 16th James

Bond flick, *Licence to Kill*. Universal Pictures will flourish yet another comic revision of *The Three Musketeers*, *The Return of the Musketeers*.

Even some films that aren't sequels will have a familiar look.

Warner has one of the sum-

mer's most eagerly awaited movies: *Batman*, a new take on the comic-book classic, starring Michael Keaton as the Caped Crusader and Jack Nicholson as his archenemy, the Joker. The movie, filmed primarily in London, cost more than \$40 million—about twice the going price for a major film. Walt Disney Co. doesn't have any blockbuster candidates this year, but the studio will reissue the classic cartoon *Peter Pan*.

Hollywood executives and analysts believe the sequels will help revive moviegoers' interest after a quiet spring. Phil Garfinkle, senior vice-president of Entertainment Data Inc., which tracks ticket sales, predicts sequels will rake in as much as \$800 million of the \$1.5 billion in total summer ticket sales. With that momentum, Hollywood could break the record for annual box-office sales for the fourth straight year.

Columbia has the most to lose among the major studios if the analysts are wrong. Its other summer films—including *Casualties of War*, a Vietnam War saga starring Sean Penn and Michael J. Fox—look less promising. And it will take a while before the studio can release many more movies with such proven moneymakers as Cher, Michael Douglas, and Sally Field, who shunned Columbia during David Puttnam's stormy 18-month reign that ended in 1987. Since taking charge of the Burbank (Calif.) studio 19 months ago, Steel has wooed back the stars. But the five-month writers' strike last year delayed many new productions.

SURE THING. Columbia needs some successes to make ends meet. Without several hits this year, the studio's cash flow could fall as much as \$100 million short of the interest payments on the \$1.1 billion in debt it is carrying, says First Boston Corp. analyst Roy W. Hong in a recent report. A bad summer might also rekindle Coke's interest in selling its 49% stake in the studio, other analysts say.

Steel says the production schedule, not fear of Indiana Jones, prompted Columbia to wait until June 16 to release *Ghostbusters II*. But by conjuring up a sequel to the Bill Murray-Dan Aykroyd hit, Steel is clearly looking for a sure thing. With the financial worries haunting Columbia, Steel has taken the advice of the *Ghostbusters* theme, when it asks: Who you gonna call?

By Ronald Grover in Los Angeles



**GHOSTBUSTERS, II:
A COMIC-STUDD CAST REUNION**

COLUMBIA: RUNNING HARD, YET FAR BEHIND

Studio	Number of 1989 releases	Market share 1989
MGM/UA	10	15.8%
WARNER BROS.	13	15.0
UNIVERSAL	6	14.6
DISNEY	9	14.3
FOX	8	10.1
ORION	5	9.5
PARAMOUNT	4	8.0
TRI-STAR	6	4.9
COLUMBIA	11	3.9

DATA DAILY VARIETY

All figures as of Apr. 16, 1989

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including the company's nationwide bus line, were divested. At the same time, new businesses with excellent growth and profit potential were established or acquired.

For example, Purex household and laundry products were added to the personal care and packaged foods brands of Greyhound's Dial Corporation. Premier Cruise Lines, the official cruise line of Walt Disney World, was launched. Dobbs food service for air



Travelers was acquired, complementing Greyhound's existing airport and food service businesses. General Motors' RTS transit bus manufacturing and parts operation was purchased to expand Greyhound's top-ranked intercity coach-building business.

Today, Greyhound's four business segments — consumer products, services, transportation manufacturing and financial — produce revenues at a \$3 billion annual rate.

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At Greyhound, we believe in renewing the company day by day.

The Greyhound Corporation

EDITED BY HARRIS COLLINGWOOD

TROUBLE IS KNOCKING AT AVON'S DOOR

► Avon Products has unwelcome visitors knocking at its door. Amway and Minneapolis investor Irwin Jacobs have teamed up since April to buy 10.3% of the cosmetics maker for \$151 million. On May 3, the partners said they may seek control of the \$3 billion company, which last year lost \$405 million and is trying to shed its health care units.

Avon Chairman James Preston insists the company is not for sale. But Avon's heavy debt and undervalued stock will make it difficult to escape Jacobs and Amway or other potential bidders.

The partners' interest in Avon isn't too surprising. Like Avon, closely held Amway is famous for its direct-sales force, which pitches everything from housewares to hosiery. In March, Jacobs bid unsuccessfully for another door-to-door sales company, Shaklee of San Francisco.

MET LIFE BUYS INTO CSFB

► Metropolitan Life Insurance's May 3 decision to buy 10% of Crédit Suisse-First Boston seems like a shrewd way for the giant insurer to gain a toehold on Wall Street. But for CSFB, formed in December with the merger of First Boston and Financière Credit Suisse-First Boston, a Japanese partner may still be needed to complement its U.S. and European operations. Failure to secure a Japanese buyer could hamstring CSFB's grand plan of creating a dominant global investment bank.

WHAT MAKES JOHNSON CONTROLS SO SPECIAL?

► Johnson Controls, a \$3.1 billion Milwaukee conglomerate, cranks out such mundane goods as automated building

control systems, automotive seats, and plastic bottles. But Wall Street gets a charge out of Johnson anyway. Its stock has shot up 6 points, to 42, in recent weeks on takeover talk. The cast of rumored raiders includes Chicago investor Sam Zell, Mark IV Industries, and Banner Industries, none of which would comment on their intentions.

Why the rumors? Johnson's stock, despite the recent run-up, trades well below the company's estimated \$66-a-share bust-up value. Even more tantalizing to a potential raider is that Johnson's four key businesses boast market-leading positions, yet there's little overlap among them.

BENEFITS: BRADY GIVES BUSINESS A BREAK

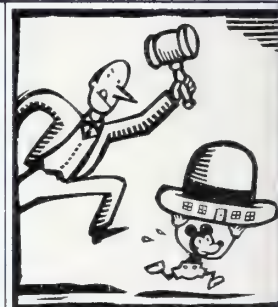
► The Treasury Dept., under a hail of criticism, has postponed the effective date of a complicated law governing employee health benefits. On May 1, Treasury Secretary Nicholas Brady said the government won't require employers to begin testing employee benefits for compliance with the law, known as Section 89, until Oct. 1.

The complex requirements, part of the 1986 Tax Reform Act, were designed to assure that health benefits are fairly distributed. But business groups contend that the requirements are too onerous. Brady is asking Congress to

HEIGH-HO, HEIGH-HO, IT'S OFF TO COURT WE GO

The folks who brought you Tinker Bell have displayed a litigious streak of late. First Walt Disney Co. sued the Academy of Motion Picture Arts & Sciences for using a Disney-like Snow White character without permission in its Academy Awards broadcast. Disney dropped the suit after the Academy apologized. Next, Disney sternly ordered three Florida day-care centers to remove the unauthorized painted likenesses of Mickey Mouse, Goofy, and Donald Duck from their exterior walls.

Now, Disney finds itself the object of a similar attack. Apr. 28, Brown Derby, an Ohio restaurant chain, sued Disney for opening a Brown Derby diner at its new Orlando theme park. Disney says it got an O.K. from two Brown Derby restaurants in California. But the Ohio chain, which is unrelated to the West Coast eateries, says it has owned the rights to the name for 50 years. It's asking for \$25 million.



simplify the law, and he's getting some support from House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.).

THE HIGH COURT TAKES A SWIPE AT SEX BIAS

► The U.S. Supreme Court has given a boost to women who claim they were turned down for jobs or promotions because of their sex. The May 1 ruling involved a decision by accounting firm Price Waterhouse not to consider a woman for a partnership.

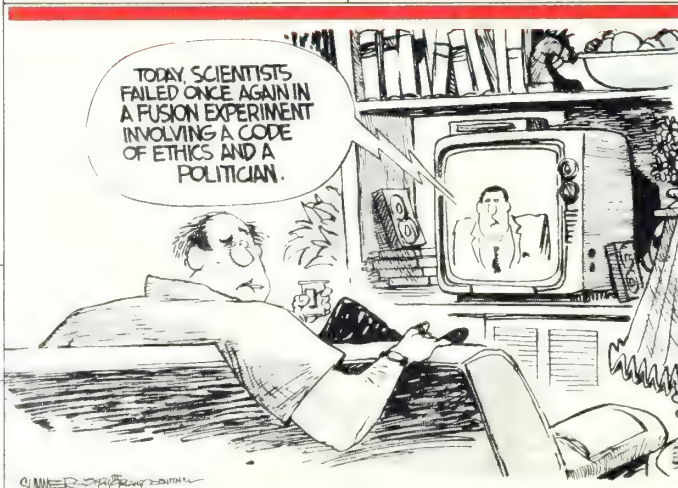
The justices said that once a woman presents evidence that her sex played a role in

an employer's job decision, the burden shifts to the employer to prove there were legitimate reasons for withholding the job. And the high court found that evidence of sexual stereotyping—judging a woman by whether she meets traditional expectations of women's behavior—can be used to prove discrimination.

A SWEET DEAL FOR KARLA SCHERER

► R. P. Scherer's auctioneer has become its buyer. On May 1, winning bidder Shearson Lehman Hutton Holdings at its merchant-banking partnerships offered \$352 million, or \$28.19 a share in cash and preferred stock valued at \$3.56. That's more than other bidders were willing to pay, but about \$2 a share less than arbitrageurs had expected.

Karla Scherer hired Shearson last June to find a suitor when the stock was trading at 16. Scherer, daughter of the company's founder, pushed for the sale of the company after filing for divorce from Peter Fink, who was then Scherer's CEO. She eventually ousted her ex-husband. With 33% of the company's voting power Scherer will gain some \$50 million in pretax cash.





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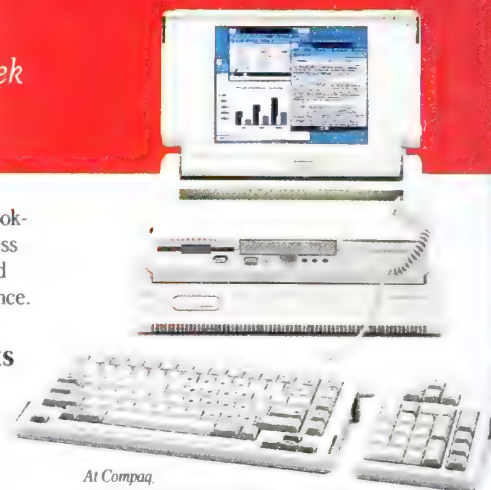
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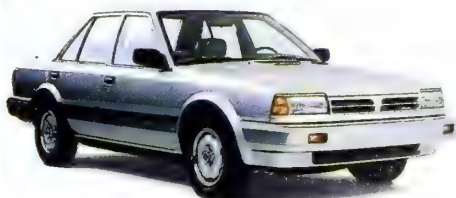
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CAPITAL-GAINS CUTS: NEW LOOK, SAME DIM PROSPECTS

Since taking office, President Bush has been stung by criticism that he's walked away from campaign promises, including his pledge to slash the tax rate on capital gains. So the Administration is cooking up some schemes to revive the capital-gains cut. Congress is responding as if it had been served yesterday's oatmeal.

Bush has proposed slashing the top rate on gains to 15% from 33%—but only for stocks and other financial paper. Now, Treasury Secretary Nicholas F. Brady is hinting that he would consider extending the plan in future years to depreciable assets, such as timber and real estate. The goal is winning the backing of some key lawmakers who have so far opposed the limited cut in capital-gains taxes. One target: Oregon's Bob Packwood, ranking Republican on the Senate Finance Committee. Packwood has vowed to kill the Bush proposal if it does not include more generous tax treatment for timber.

JUSTLY BREAK. So far, the ploy isn't working. Packwood hasn't endorsed the cut partly because it might lead to higher individual rates. And groups such as the National Association of Realtors would rather focus their lobbying efforts on tax issues they regard as more important, namely depreciation or certain investment losses.

The biggest impediment to a lower rate on gains is the budget deficit. The congressional Joint Tax Committee estimates that broadening the break for capital gains would cost \$3 billion over the next five years. And that's in addition to the \$25 billion it would cost over five years just to lower the rate for stocks and other financial assets.

Even the Treasury, which believes cutting taxes on gains could increase revenues by encouraging capital investment, admits that extending the break to other assets would cost about \$2 billion a year.

The plan is the Administration's second try in recent weeks to revive the capital-gains initiative. Earlier, senior officials noted that Bush might be willing to accept a hike in the federal gasoline tax to finance a cut in capital gains. But the suggested trade-off is bombing on Capitol Hill. Senate Finance Committee Chairman Lloyd Bentsen (D-Tex.) is a fierce foe of

higher gas taxes. And senior GOP Finance members—most of them Westerners whose constituents rely heavily on their cars and trucks—have no interest in the plan. Says an aide to one Republican committee member: "Whoever came up with this one has got to be on drugs." With even Republicans unhappy, the capital-gains cut is unlikely to find many takers.

By Howard Gleckman

BUSH WON'T GET ANY MILEAGE FROM THIS AUTO COMPROMISE

A key characteristic of George Bush's style is his penchant for resolving disputes by splitting the difference. But this passion for compromise may cost the President an opportunity to shore up his environmental credentials.

Transportation Secretary Samuel K. Skinner is fighting hard to increase the federal corporate average fuel economy (CAFE) standard for cars from 26.5 to 27.5 miles per gallon for the 1990 model year, and he has strong backing from the Energy Dept. and the Environmental Protection Agency. But some White House aides fear that a higher mileage standard would mainly benefit Japanese auto makers. Ideological opposition to regulation is also playing a part. Chief of Staff John H. Sununu recently invited free-market conservative groups to the White House to present their plea for scrapping CAFE and easing other regulations. "Sununu said he was no friend of CAFE," recalls one participant, Fred L. Smith Jr., president of the Competitive Enterprise Institute.

Sununu may settle for a compromise at 27 mpg. General Motors Corp., which fears it would have to trim production of big cars to average 27.5 mpg, says it can live with 27.

The trouble is that 1 mpg is such a small bump that halving it may make the President look silly. "Bush has tried to cut every loaf in half," grumbles one conservative activist. "A compromise means he'll have both sides mad at him."

By Richard Fly with Seth Payne

CAPITAL WRAPUP

THE PENTAGON

Defense Secretary Richard B. Cheney was the last member of the Bush Cabinet to be named, but he's making up for lost time by moving swiftly to assemble his team. Solomon J. Buchsbaum, an executive vice-president of AT&T Bell Labs, is Cheney's choice to head one of the Pentagon's toughest jobs. Buchsbaum is expected to be nominated as Under Secretary for acquisition. The job was created by Congress in 1986 to tighten civilian control over military procurement but has never lived up to its potential. In another move to keep Pentagon brass on a short leash, Cheney has asked

David S. Chu to stay on as assistant secretary for program analysis and evaluation. Chu angered the services by leading fights to kill such programs as the Marines' V-22 tilt-rotor aircraft.

TAKEOVERS

The Senate hasn't given up efforts to reduce incentives for debt-financed corporate buyouts and takeovers. Finance Committee Chairman Lloyd Bentsen (D-Tex.) says he's still looking for a formula that would provide more equal tax treatment of debt and equity. If he discovers a workable approach, it would be included in legislation, expected to pass this fall, implementing the fiscal 1990 budget pact.

THE WHITE HOUSE

White House image-maker Stephen M. Studdert has been having a tough time. Supporters of President Bush claim that Studdert, assistant to the President for special activities and initiatives, hasn't produced much of either. He takes the rap for the recent cross-country swing that earned Bush scant press attention. Some colleagues say that Studdert set himself up for the criticism by becoming highly visible in the early days of the Administration. While his job doesn't appear to be on the line, the backbiting is evidence of tension on the White House staff.

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IS THE ERA OF CHEAP ASIAN LABOR OVER?

Rising wages and union strife are sending some companies packing

When Tandy Corp. set up an electronics manufacturing facility in South Korea in 1972, the lure of low-cost, docile Korean labor was an obvious attraction. But this past March, Tandy closed its factory in the face of an angry anti-American labor

confrontation, leaving 1,400 workers without jobs. In addition to the strife, Korea's labor costs have exploded, and it no longer made economic sense to make low-end computer components there.

Today, workers in East Asia are neither cheap nor docile. Like Tandy, other U.S. companies who shifted manufacturing to Asia's Four Tigers are suddenly facing this change. Aside from Korea's labor strife, severe shortages of workers in Singapore, Hong Kong, and Taiwan are forcing production cutbacks and delivery delays. In these four economies, average industrial wage increases have ranged from 32% to 45% since 1984 (table, page 46). Even in Taiwan, strikes are becoming more frequent, affecting such companies as Ford Motor Co.

AGGRESSIVE STRATEGIES. Japanese and other Asian companies appear to have seen the challenges of rising labor costs more quickly than many Americans did. They have moved more aggressively to make more technologically sophisticated products at home, while shifting low-end production to newly emerging countries. Hong Kong companies employ more industrial workers in Taiwan's southern Guangdong province than in the British colony itself. Singaporean companies are making a big push into neighboring Malaysia. Korean and Japanese companies are emerging as major investors in Thailand, the Philippines, and China. And the Japanese are

pouring billions of dollars into all of these countries.

The result is a fundamental change in how things get made in East Asia. Some U.S. companies, such as Mattel Inc., are shifting manufacturing back to America. Others have joined the parade into less-

creased starting salaries, day-care allowances, and a sign-up bonus of as much as \$250. Likewise, American Telephone & Telegraph Co., which makes telephones in Singapore, is offering such benefits as higher pay for late shifts to get the workers it needs in Singapore,

while switching some of its production to Thailand.

CLEAR CHANGE. U.S. investment in the Four Tigers is still increasing, but there is a marked change in strategy. In the old days, American companies put up labor-intensive facilities, often with the purpose of shipping products back home. Now, the investments are beginning to concentrate on technology-intensive areas and on cracking booming Asian markets. Numatics

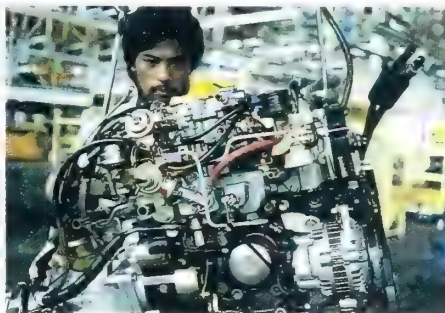
Inc., a privately held Highland (Mich.) company with about \$200 million in sales, plans to start assembling valves in Taiwan this year for industrial automation equipment. "Our purpose in building there is to serve the [Asian] market, not to import back into the U.S.," says President John Welker.

Worst hit, by far, are U.S. manufacturers in Korea, which is facing the severest labor crisis in its history (page 55). Radical labor leaders have taken charge of many unions, and about 50 labor disputes have broken out at foreign plants so far this year. Besides Tandy, the disruptions have hit IBM, Motorola, Pico Products, American Life Insurance, and Fairchild Semiconductor. Although IBM solved its problem quickly by recognizing a new union, others couldn't cope. Pico Products shut down a plant, and on May 3, Fairchild announced that it, too, would close its plant and negotiate a severance package for 271 workers.

The strife is taking on an increasingly



TO STAFF ITS PHONE PLANT IN SINGAPORE (ABOVE), AT&T HIKED BENEFITS. FORD DID THE SAME TO MOLLIFY STRIKERS IN TAIWAN



developed Asian countries in search of ever cheaper labor.

Still other businesses are being forced to find workers any way they can. When Seagate Technology moved its disk-drive production to Singapore in 1983, it had no trouble hiring 300 workers. But to add an additional 1,000 line operators to today's work force of 9,700, Seagate has to send recruiters to Singapore's working-class housing projects. It offers in-

political hue. U.S. companies "came here for cheap labor, and that means exploitation of Korean workers," says a leaflet distributed by the Tandy union. The result: Many U.S. executives are rethinking their decisions. "You should not come to Korea unless you have to," says one American executive.

In the other three tigers, strikes are fewer and almost never turn violent. Still, since martial law was lifted in mid-1987, labor activism has increased in Taiwan, affecting the auto, textile, paper, and electronics industries. This year, the number of disputes doubled, hitting not just manufacturers but also transportation companies and even a duty-free shop at Taipei's airport.

Ford has been a prominent target in Taiwan. Its 70%-owned Taiwan subsidiary, Ford Lio Ho Motor Co., was hit by strikes or slowdowns this year and in 1988. In both cases, its workers demanded a larger percentage of corporate profits, and Ford was obliged to increase overall compensation. But Ford isn't complaining too loudly. A burst of consumer spending helped boost its sales in Taiwan last year by a remarkable 70%.

Labor shortages, rather than strikes, are the biggest problems for U.S. companies in Taiwan, Hong Kong, and Singapore. In all three, strong economic growth has increased demand for workers far faster than the population can supply them. Taiwan's manufacturing sector alone is short some 200,000 workers, especially in footwear, construction, knitwear, and toys. Hong Kong also has about 200,000 vacancies, and its construction, hotel, retail, and garment industries are suffering. Even in tiny Singapore, the shortfall has reached 80,000.

RUDE SHOCK. In Taiwan and Korea, the labor problem is compounded by strengthened local currencies. Lee Jacobs, general manager at the Taiwan subsidiary of Illinois-based Electro Magnetic Devices Inc., says the latest rise of the New Taiwan dollar, to about 4¢, an increase of 6% in less than a week, has driven his costs too high. "I don't know what I'm going to tell my customers" in the U.S., he says. If he can't move some production to a cheaper labor country, he worries that "we will cease to exist."

Wyse Technology also got a rude shock. Early last year, it started up a new factory making personal computers in Hong Kong. Initially, Wyse was able

THE EXPLOSION IN ASIAN LABOR COSTS

	Average industrial monthly wage		Percent increase
	1984	1988	
SOUTH KOREA	\$302	\$633	110%
TAIWAN	325	598	84
HONG KONG	363	544	50
SINGAPORE	416	547	32

DATA: BW

to hire 550 workers quickly because it took over the premises of a toy factory that had closed down. But wages have already risen 15% to 20%, to about \$350 a month for an entry-level operator. After the Chinese New Year in February, the plant lost about 100 workers,

and manager Garwing Wu is still trying to replace them. "If people are using labor cost as their primary reason to come to the Far East, they're making a mistake," says Wu.

White-collar workers, too, are increasingly hard to find in Hong Kong, Singapore, and Taiwan. In Hong Kong, the problem is exacerbated by a serious

brain drain: Last year, about 45,000 people emigrated from the colony because of uncertainty about the future after 1997. Singaporeans, too, are fleeing the pressures and rigidities of life at home for jobs abroad.

The labor pressures that American companies are facing in the Four Tiger also apply to the Japanese. But there is an important difference. Although the currencies of Taiwan, Korea, and Singapore have strengthened against the U.S. dollar, they have weakened against the yen. So production costs there are still cheap by Japanese standards. What's ultimately at stake for American companies as they scramble to reposition themselves in Asia is whether they are moving fast enough to keep up with the Japanese.

By Dori Jones Yang in Hong Kong and Larri Nakarmi in Seoul, with Dirk Bernett in Taipei and bureau reports

MEXICO



MARCHING IN MEXICO CITY: LABOR STRIFE MAY DISRUPT TALKS TO REDUCE THE COUNTRY'S DEBT

WHY SALINAS MUST TAME THE TEACHERS

He needs to quell their strike before it sparks other protests

In a balcony above the May Day parade, Mexican President Carlos Salinas de Gortari looks on as more than 100,000 workers file peacefully below. Staged as elaborately as a Cecil B. De Mille movie, the parade is meant to deliver a message: Even in an economic crisis, the President can count on the undivided support of Mexican workers. But Salinas knows better. From his post, he

can also see the helmeted police, with their Plexiglas shields and Doberman pinschers, keeping dissident workers from spoiling the show.

Salinas faces major labor trouble. He has lost control of Latin America's largest union, the Mexican teachers. Wildcat strikes by teachers since mid-April have shut most of Mexico City's schools and others in outlying states. The teacher

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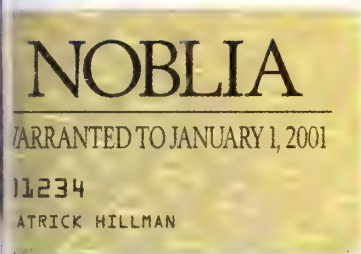
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ginated by NASA, that com- es the durability of titanium h the warmth of gold.

Detailing on a Noblia® watch ot confined to the dial. Some- ng as insignificant to other chmakers as a winding stem is is a full, coin-edged cabochon wn, set with onyx.

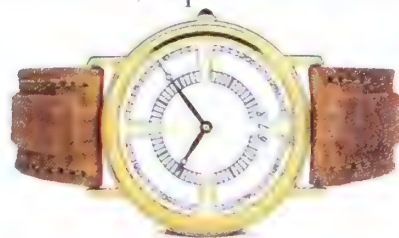
Nor have we neglected the ts of the timepiece that don't p time. Our bands are fash-

ioned only from genuine lizard or crocodile or peccary (the finest glove-grade pigskin), and even the narrowest straps are padded and finely stitched for comfort and good looks. (Bracelet versions of Spirit watches are joined with a jewelry clasp that has been engraved with the maker's mark, a sign of nothing but pride.)



This painstaking approach to watchmaking reflects an era when craftsmanship was a given; when the moon wasn't a destination; and when time was measured by the slow sweep of a second hand over Roman numerals on a mother-of-pearl dial.

But unlike its mechanical forebearers, a Spirit watch is water-



resistant to three atmospheres (99 feet). And it is equipped with a quartz movement so accurate it may take years before the loss of even a few seconds can be detected by its owner.



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are demanding a 100% pay hike and the right to choose their own leaders. But the Salinas administration says it cannot afford such huge pay increases. And it is worried that the teachers' movement for greater independence will spread to other groups, such as the 1 million-strong government workers' union.

The teachers, says Mexico's labor patriarch Fidel Velazquez, 89, could loosen "an avalanche" of unrest. That could disrupt talks to cut the country's \$100 billion foreign debt. Big pay hikes might also upset Mexico's 17-month-old anti-inflation pact. "The final measure of this will be its effect on inflation," says Carl D. Ross, a consultant in Mexico City.

The teachers' struggle finds Salinas rushing to catch up with events. He stuck too long with the teachers' union leader, Carlos Jonguitud Barrios, who kept an iron grip on the 1.2 million-member union for 17 years. Jonguitud held wages below \$200 a month, and his strong-arm tactics exasperated the rank and file. They went on strike on Apr. 19. **DAMAGE CONTROL?** Salinas did not dismiss Jonguitud until a week later—too late to appease union members. His replacement, Elba Esther Gordillo, was rejected by strikers because of her association with Jonguitud. A government offer to raise salaries 25% was also turned down. Over the May Day weekend, the administration took the battle to the airwaves, rebuking teachers in TV ads. But the instructors took to the streets, ridiculing Salinas with their chant: "We're going to pull out baldy by the ears."

Salinas' failure with the teachers contrasts with his earlier success with the oil workers' union. While a submissive rank and file looked on, the President sent corrupt leaders to jail. But although power in the oil union is wielded from the top, the teachers' strength percolates from below—far from the levers of presidential power. "The oil workers were cold," says Jose Domingo Betanzos, a teacher from the state of Chiapas. "We're hot."

The government's challenge now is to keep the heat from spreading. More strikes could erode the administration's popularity as it heads into state and city elections this summer. Worse, rising unrest could push Salinas to use force, an option he has so far avoided.

Talks with the teachers continue around the clock. The 25% pay hike on the table is more than other unions have won. But by striking, teachers are fighting to wrest control of their union from the government. If they succeed, others will follow. That's one lesson Salinas doesn't want labor to learn.

By Stephen Baker, with Michael Zellner, in Mexico City

ISRAEL

MEDIA BARONS ARE MAKING PILGRIMAGES TO JERUSALEM

The *Jerusalem Post* is the latest paper to draw a bevy of bidders

Desperate for cash, Israel's Koor Industries was all set last December to sell its majority interest in the influential *Jerusalem Post* for a mere \$900,000 to a New York-based investment group. But the conglomerate's directors had second thoughts. Why not open the bidding for Israel's only English-language daily to all interested buyers? To the directors' surprise, they touched off one of the nation's fiercest takeover battles yet.



HAWKING THE POST: PREDATORS SEE GROWTH POTENTIAL AND POLITICAL CLOUT

Global press barons have suddenly taken a keen interest in Israeli media properties. The predators are attracted by the growth potential of newspapers such as the *Post* and by the political influence they command. Even though the *Post* lost \$200,000 on \$20 million in sales last year, British media magnate Robert Maxwell and Canadian financiers Charles R. Bronfman and Conrad M. Black all entered the contest. On Apr. 27, Toronto's Hollinger Inc., controlled by Black, emerged as victor. Unlike his rivals for the paper, Black comes from outside the Jewish business Establishment. But Hollinger's \$17.3 million bid for a 78% stake in the *Post* beat the other offers by as much as \$10 million.

The sale of the *Post* caps a series of moves that are changing the face of Israeli media. Last August, Maxwell paid \$8 million for a 33% stake in *Ma'ariv*, Israel's No. 2 Hebrew-language daily. Then in March, Arye Genger, a multi-millionaire associate of Rapid-American Corp.'s Chairman Meshulam Rikis, bought control of *Haolam Hazeh*, a center-left weekly. The sale sparked an uproar because Genger has close ties to Israel Commerce & Industry Minister Ariel Sharon, the country's leading hawk. Genger now wants to buy *Kifim*, Israel's leading business weekly. **'TREMENDOUS NETWORK.'** Of all the deals, the *Post* sale is most significant, because the paper's international influence exceeds that of Hebrew dailies. King Hussein of Jordan is said to be an avid reader. The *Post*'s profitable weekly international edition, with a circulation of 65,000, is an important Israeli voice among U.S. and European Jews, whose support is key to Israeli policy.

Black is likely to build on that presence. Already, Hollinger controls 200 papers in North America and the *Day Telegraph* in London. "That's a tremendous network for distributing and promoting the *Post*," says attorney Daniel W. Colson, who negotiated the *Post* deal. While Black aims for expansion, Britain's Maxwell and Canada's Bronfman are left disappointed. They had teamed up to bid for the *Post*, mounting a campaign to sway Israeli politicians and Koor board members. But Maxwell's support of Israel's Prime Minister Yitzhak Shamir, leader of the center-right Likud Party, scored few points with the *Post*'s editorial board, which backs the Labor Party. Despite losing the bid, Maxwell remains Israel's single largest foreign investor, after spending \$76 billion on stakes in electronic and pharmaceutical companies in the past year.

Now that the *Post* deal has been sealed, the betting in Israel is that other papers, such as *Yedioth Aharonoth*, the country's best-selling daily, could be next on the auction block. With international predators willing to pay high prices, the battle for the hearts and minds of Israelis is far from over.

By John Rossant in Rome and Nyl Sandler in Jerusalem, with Chuck Harkins in Toronto



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THE ZULUS AND ELECTRONIC WARFARE

In 1879 British a under Lord Chelmsford invaded Zululand in south Africa to claim it as Crown property. The campaign was expected to be over before the month was out. But the Zulus proved to be no walkovers.

Among their many military talents was their use of deception. One trick was for an *impi* (the equivalent of a division) to condense its formations so the enemy could not count its regiments. Another was to have small, diversionary groups of soldiers drive herds of cattle around the countryside, raising dust and deceiving the enemy as to the location of the main Zulu force.

The Battle of Isandhlwana Charles Fripp, 1885, The National Army Museum, London



Utilizing such deceptive tactics, the Zulus misled
Elmsford into splitting his army and taking half of
in a wild goose chase to the southeast.

Meanwhile, from the north, the main Zulu *impi*
10,000 attacked the remainder of the English force
located at the base camp at Isandhlwana. The sur-
prise was complete. The British were massacred. And
Elmsford, hearing of the disaster, retreated to Natal.
The Zulus were applying a timeless principle of
warfare. Deception. A sin in everyday life, in time of
war a virtue. In the late 20th century it has become
essential.

Nowadays, the primary medium of this realm of
warfare is electronic. Planes, tanks, ships, helicopters
have electronic means of finding the enemy or pre-

venting him from finding them. Modern battle now,
more than ever, favors the side with the most effective
electronic technology.

While the Zulus used deception to help them win
a battle, that tactic is now interwoven into every aspect
of defense. From the movement and intentions of vast
forces, down to individual encounters between aircraft
or tanks, electronic deception is decisive.

But beyond this, electronic technology becomes
decisive on the grand strategic level. For it is part of
the deterrence that compels potential enemies to find
ways to be friends.

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DIPLOMACY, GORBACHEV-STYLE, LOOKS LIKE A WINNER IN BEIJING

The May 15-18 summit in Beijing between Soviet President Mikhail S. Gorbachev and Chinese leader Deng Xiaoping will underscore the vast changes in Communism since 1959, when a bitter rift between their countries split the Communist bloc. For both men, it will be a political milestone: probably the 84-year-old Deng's last international role and, for Gorbachev, a big step in expanding Soviet political and economic influence in the Far East. That is why both sides are laying down Moscow's failure to completely remove the three obstacles that Beijing insisted had to be cleared away before relations could be normalized. These were Soviet intervention in Afghanistan, tensions along the Sino-Soviet border, and Cambodia's occupation by Vietnam, a Soviet client. Moscow's ongoing arms supplies to Afghanistan and uncertainty about Vietnam's promised pullout from Cambodia will create undercurrents of tension at the summit.

What Gorbachev and Deng hope to achieve by renewing normal ties between the Communist giants are mostly economic gains: ending the heavy cost of a major military buildup along their 3,000-mile border and spurring their economies through stepped-up trade and investment. Gorbachev plans to remove 200,000 troops facing China as part of the 10% cutback in Soviet military manpower that he announced last December. And China's 1989 budget cuts real military outlays for the 10th consecutive year. Economic links, too, are already expanding. Trade and joint ventures are booming, for example, between China's Heilongjiang province and the Soviet Far East, which plans to import 10,000 Chinese construction workers this year. **RESH HAND.** For the U.S., the warmup between the Asian giants crimps its ability to exert influence by playing the "China card" in relations with Moscow. Although China is far too big to manipulate, the U.S. took advantage of the Communist split to encourage China to expand trade and other ties

with the West. And by providing military aid, the U.S. helped China meet Soviet military pressure along its borders. Now, although Beijing still needs Western technology and markets, it sees normal Soviet ties as a chance to diversify its economic relations—including a recent proposal to acquire a nuclear power plant from Moscow. Beijing is still wary, however, of Soviet suggestions, outlined by Deputy Premier Igor Rogachev, for an Asian-Pacific security system based on the "combined efforts of all the states located there." China sees this as a Soviet bid for an expanded role as a Pacific power, aimed partly at building links to Japan.

For Deng, Gorbachev's visit carries more symbolism than the Chinese leader bargained for. As a member of the Long March generation that broke with the Soviets, he is showing political flexibility by reconciling with Moscow. But suddenly, Deng's authority has been severely challenged by recent student demonstrations in a dozen cities demanding democracy. The students are inspired by Gorbachev's *glasnost*—showing Deng that his brand of authoritarian socialism is obsolete.



STUDENT PROTESTS ARE A REBUFF TO DENG

For Gorbachev, the meeting will be only the latest example of his technique of scoring political gains, as he has done in Europe, by reducing Soviet threats and offering concessions—in sharp contrast to his Kremlin predecessors' preference for force and bullying. In the past, the main result of Soviet military muscle-flexing and interventions was to push China, South Korea, and Japan closer to the U.S. Now South Korea is also becoming an important trading partner and prospective investor in the Soviet Far East and Siberia.

The Beijing summit is a major move in Gorbachev's strategy for easing conflicts and removing diplomatic roadblocks. His approach has drastically altered Europe's political landscape—and seems likely to reshape Asia's as well.

By Dinah Lee in Beijing

GLOBAL WRAPUP

SOUTH KOREA

The death of six policemen at the hands of radical students threatens to transform South Korea's deepening political crisis into open conflict between extremists on both ends of the spectrum. Students in the port city of Pusan ignited a fire that killed the policemen on May 3 as they tried to rescue student-held hostages.

Labor leaders and political dissidents have joined student radicals in trying to bring down President Roh Tae Woo. They are ignoring appeals for moderation from opposition leaders Kim Young Sam and Kim Dae Jung. In response, conservatives and the military

are pressuring Roh to crack down. They see the leftist activity as being inspired by communist North Korea. After the Pusan incident, Roh warned in a TV address that he may declare an emergency, which could bring troops onto campuses and into factories.

Most alarming for Roh is his loss of support among middle-class backers, who see him as indecisive. Since he took office in February, 1988, student unrest has intensified and labor actions have become more radical. In a newspaper poll, 40% of respondents said Roh has failed to perform. His most immediate crisis is the threat of a general strike. With radicals dominating unions in key industries, such a

walkout could cripple the economy.

Even moderate opposition leaders acknowledge that pro-North Korean groups are fomenting at least part of the turmoil. In a statement on Apr. 26, three opposition leaders distanced themselves from Chonminnyun, a new group that seeks to overthrow the South's capitalist system and reunite the peninsula under communist rule.

In coming weeks, Roh will have to deal firmly with labor and campus unrest, while bringing former President Chun Doo Hwan to testify on charges of corruption and repression. At stake is Roh's ability to hold Korea's fragile democracy together.

By Lazmi Nakarmi in Seoul



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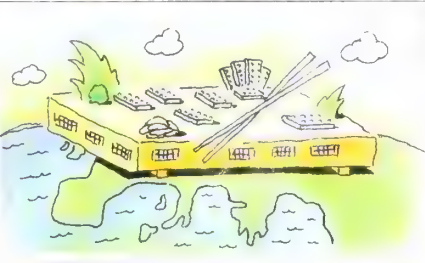
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Developments to Watch

EDITED BY NAOMI FREUNDLICH

SEMICONDUCTORS: FUJITSU'S END RUN AROUND THE EC



When it comes to producing semiconductors, Europe trails a lot further behind Japan than does the U.S. But the European Community agrees with U.S. officials on one reason its

chipmakers are suffering: predatory dumping practices by Japanese companies. To remedy that, the EC ruled in January that only chips that are "printed" locally will enjoy free access to EC markets. The aim is to encourage Japanese companies to boost the content of European-made parts in the copiers, TVs, and other equipment they sell in Europe.

It didn't take long for Japan to react. In mid-April, Fujitsu Ltd. unveiled plans for a huge, \$680 million chipmaking complex in northeastern England. That's almost triple the cost of today's world-class semiconductor plants. But even that is only for starters, says Fujitsu. The facility will occupy less than 40% of a 110-acre site, and it will be expanded to the hilt, creating perhaps the world's biggest chipmaking operation.

While Fujitsu's move is shaking up electronics companies on the continent, Britain welcomes the investment. It will provide 1,500 jobs by 1994 and reduce the country's deficit in electronics trade. In fact, Britain's Trade & Industry Dept. chipped in \$50 million in financial assistance.

A STRESS DETECTOR THAT MAY PREVENT PLANE DISASTERS

Last year, when the roof peeled away from an Aloha Airlines 737 jet near Maui, Hawaii, engineers claimed that the constant pressurization and depressurization of multiple take-offs and landings had weakened the airplane's metal skin. Now, engineers at Lockheed Electronics Co. are developing an on-board computer system for aircraft that just may prevent similar disasters by monitoring stress on critical components.

Lockheed's system consists of a computer microprocessor that collects and analyzes data from up to 70 strain gauges on the aircraft's wings and fuselage. They also record when specifications have been exceeded. Beyond preventing accidents, the on-board strain monitor could save airlines money by pinpointing problem areas and avoiding frequent major aircraft overhauls that cost up to \$5 million each. The Lockheed system, which should be ready for delivery later this year, will cost \$10,000 to \$50,000 depending on complexity.

STRIKING AT THE HEART OF THE AIDS VIRUS

Most of the experimental AIDS vaccines under development trigger the production of antibodies to proteins on the coat of the virus. But researchers worry that they won't be very effective because the virus evades attack by changing those proteins, which are essential for the virus to invade human cells. Now, clinical trials of a new vaccine are beginning at London's St. Stephen's Hospital. The vaccine, produced at Viral Technologies Inc. in Washington, targets a key pro-

tein found in the core of the AIDS virus. The protein seems to be critical to the virus' ability to reproduce, and, says the company, it remains constant.

Developed at George Washington University medical school and the National Cancer Institute, the vaccine is a synthetic protein called HGP-30 that is modeled after a portion of the core protein. In laboratory tests, the substance stimulates production of antibodies that stop the virus from proliferating. Viral Technologies says HGP-30 will be tested as a therapeutic in patients who test positive for AIDS but have no symptoms. The company also plans to test the vaccine in the U.S.

'HEY, CAPTAIN, WATCH THE ROCKS'

The newest crew member to board an oil tanker in the Gulf of Alaska could be made from silicon. Two researchers at Rensselaer Polytechnic Institute have designed a computerized system that would help guide pilots through harbors under a wide range of weather and traffic conditions. The "expert system" was originally developed to train pilots to navigate ships into and out of New York Harbor. But after the recent Exxon oil spill in Prince William Sound, the Transportation Dept.'s Maritime Administration gave the researchers, William A. Wallace and Martha R. Grabowski, funding to redesign the computer program for real-time navigation in Alaska.

The system, which will run on a microcomputer, will be tied into sensors on the bridge and to satellite navigation equipment, which provides exact readings of a ship's location. Grabowski, who has a second mate's license as well as a doctorate in decision science, says the computer will use information about fog, drifting ice, or heavy seas to plot out a course. It will tell the pilot when he has either strayed off course or is going too fast. And it will give exact instructions on how to get back on course. The main hurdle to overcome: resistance from pilots, who, says Grabowski, "are an independent breed."

CAN'T FIND GOOD HELP? ONE ARCHITECT BUILDS IT IN

Alexander, start the coffee maker," you yell from the shower. "As you wish, master," replies the electronic butler. Downstairs, the pot begins brewing, thanks to Alexander, the butler of the future.

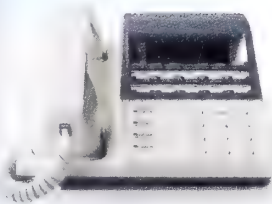
When you enter the \$3 million Encino (Calif.) mansion in which this \$75,000 computer system has been installed, Alexander greets you with a stuffy, British "hello." If a strange voice answers back, the computer can call the police or a relative for help. Alexander is controlled by an IBM PC connected to all appliances by a fiber-optic network. Its voice-recognition system, made by MasterVoice Inc. of Huntington Beach, Calif., understands 256 English verbal commands and controls the computer's work habits.

Alexander will soon have a job in more homes. Michael Nouri, the Santa Monica (Calif.) architect who designed the mansion, says that he's building two more smart homes in Encino and is negotiating to build one each in Italy, Britain and Saudi Arabia. What's next? Smart plugs that will turn down the stereo volume when the doorbell rings.





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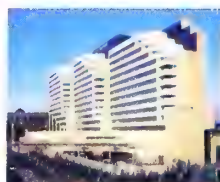
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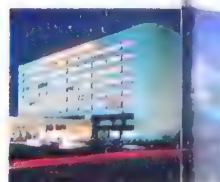
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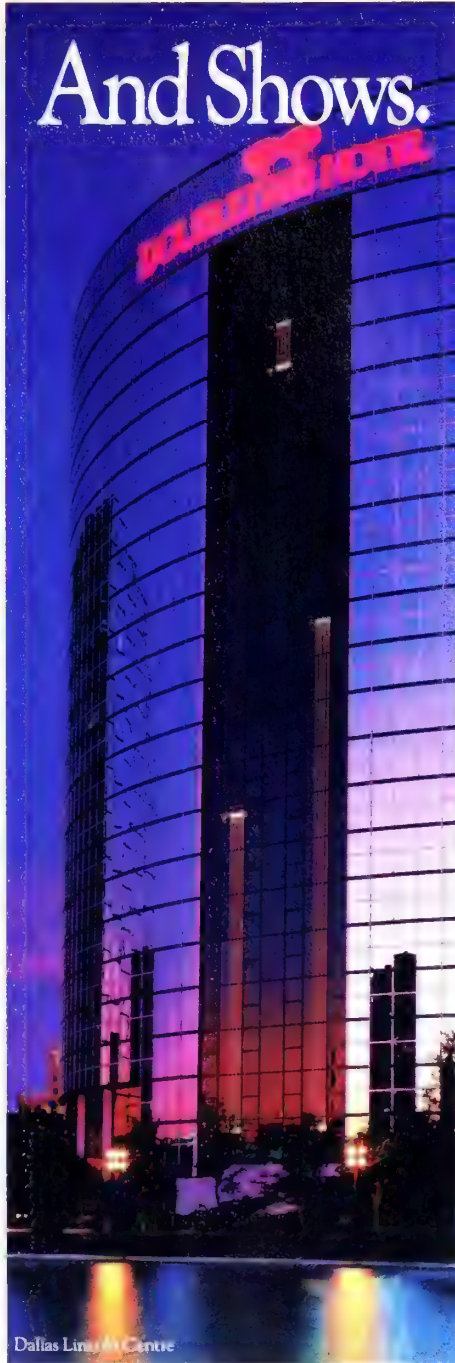
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And Shows.



Dallas Linea Hotel

And Shows.



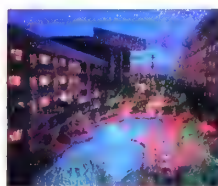
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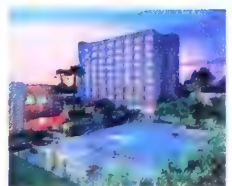
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VAN DEGRIFT PEDALS
TO SCIENCE CITY



SEARCH

AN OPEN DOOR THE U.S. ISN'T USING

Why are there so few American researchers in Japan's labs?

Fall, with a bushy red beard, Craig T. Van Degrift cuts a striking figure as he pedals to work. The commute from his small, seven-room house runs past schools and rice paddies. After 17 minutes, Van Degrift arrives at his destination: the red-brick Electrotechnical Laboratory, Japan's largest national research institute, located in Tsukuba, a sprawling "science city" 37 miles northeast of Tokyo.

The 43-year-old American scientist spends his days scouring technical documents and assembling cryogenic test equipment with three Japanese co-workers. Their mission: to determine the accuracy of a new standard for precisely measuring electrical resistance. Van Degrift, an expert in low-temperature physics, communicates in a mix of English and Japanese, which he first studied, on the job, as a high school student. "Japanese research in this area is very advanced, and while they publish their work, it's much faster to learn from

them directly," says Van Degrift, who is spending a year in the lab while on leave from the National Institute of Standards & Technology in Gaithersburg, Md.

Van Degrift isn't the only American scientist working in Japan, but he is one of a precious few. By most estimates there are fewer than 150 U.S. scientists working in Japanese laboratories. Most will be there for only a few months; only about 50 are doing long-range projects of a year or more.

TRICKLING IN. Japan, on the other hand, sends thousands of its best scientists abroad to study and work in American and European laboratories. Last year alone, there were more than 5,000 Japanese researchers working in U.S. labs. These scientists are part of the foreign talent pool that has helped make U.S. science so strong. Many are also scouts in a global economic competition, sending information and bringing back technical knowhow that is often transformed into a wide array of products.

But Japan has been less than generous in allowing foreign scientists to work in its labs. Only after years of resisting U.S. pressure is Japan relenting. Last year, Prime Minister Noboru Takeshita provided the National Science Foundation in Washington with \$4.8 million to help send U.S. researchers to Japan. And the government has opened more slots for visiting Americans at Japan's national and university labs.

The U.S. scientists are also trickling into Japanese company labs. Since 1984, Hitachi Ltd. has hosted 70 foreigners for extended stays at its Central Research Laboratory. About half of this year's 30 visitors are from the U.S. And an American Electronics Assn. (AEA) program, launched in 1984, sends 10 to 12 U.S. engineering and computer-science graduate students to Japanese company labs for a year. AEA's Japanese sponsors include Hitachi, Sony, and Toshiba.

By hosting foreign scientists, Japan gets political credit in Washington, of course. It is also anxious to strengthen its ability to do basic research. "People with different training may have quite different approaches to science, which could create a very challenging atmosphere," says Kaname Ikeda, international affairs division director at Japan's Science & Technology Agency.

TIME TO REPAY. Working shoulder-to-shoulder with Japanese researchers, American scientists can learn new techniques, bring back cutting-edge technology, and observe firsthand the Japanese



This is what we call return on investment. It's not in oil, or chemicals, or refining. It's in learning. We're investing in today's children through a unique program in Cleveland that actually puts money, up to \$6,000, into escrow for a student's college education. A serious student can cost us a lot. But kids who fail to learn will cost us all a lot more.



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Science & Technology

facility for swiftly turning basic discoveries into products. Like their Japanese counterparts in the U.S., they also can build a network of valuable contacts.

The Americans say they are getting a warm welcome. "I can walk into any lab here and find out what's going on," says Van Degrieff, who arrived last August with his wife and two daughters. "So many Japanese researchers have studied abroad. They understand that their turn has come to repay."

BABY STEPS. The differences between U.S. and Japanese labs are subtle. "There aren't many technical tricks that I've seen here that I haven't seen at home," says Van Degrieff. On the other hand, Japanese scientists do much of the work that would be left to technicians in the U.S. "In general, the Japanese scientist who is not willing to get his fingers wet is a rarity," he adds.

The U.S. scientists are struck by the Japanese attitude toward innovation. "People here are enthusiastic about making improvements a bit at a time," marvels electrical engineer Jim Maroney, who joined a Toshiba Corp. optoelectronics research lab last year. "We in the West like to go in big steps—invent the light bulb, the transistor."

Felicia Pagaduan, who is spending a year at Hitachi's Central Research Laboratory, finds Japanese thoroughness has its benefits—and drawbacks. "In the U.S., the guys I worked with were such risk-takers—here you have to be 99% sure," says Pagaduan, who is working toward a master's degree in electrical engineering at the University of California at Santa Clara.

Despite the opportunity, Americans aren't rushing to take advantage of the new opening to Japan's labs. Last year, Japan's Science & Technology Agency created 100 places for foreigners at national laboratories, earmarking half for U.S. researchers. Only 14 Americans applied. A few years ago, Japan agreed to accept three U.S. scientists to its much-ballyhooed Fifth Generation project to build advanced computers. Only one qualified researcher signed on.

SECOND-BEST. Japan's high cost of living and the perception that it is a difficult place to live because of the language and culture are a deterrent. But many U.S. researchers in Japan say that the adjustment was easier than they expected. "Word has to get out that it's possible to live in Japan with a family," says Van Degrieff.

Others argue that the crack in the door is not giving U.S. researchers access to the best Japanese labs. Although a few researchers are working for leading companies or institutes, most positions are at Japanese universities. "In

Japan, the best research is not being done at universities," says Arden L. Bement Jr., vice-president for technical resources at TRW Inc. in Cleveland. "Most of the good research is being done in industry laboratories," he adds, when "there is not the degree of reciprocity one might think."

The biggest obstacles to broader exchange are homegrown, however. Many U.S. research institutes are unwilling to spare talented staffers. And many U.S. scientists simply don't believe they have much to learn from Japan. "We have a barrier of indifference—almost an arrogance—about there being anything worth learning in basic research in Japan," says NSF's Robert Cutler.

Indeed, many researchers say that their U.S. employers are not interested in what they learned in Japan. Take for

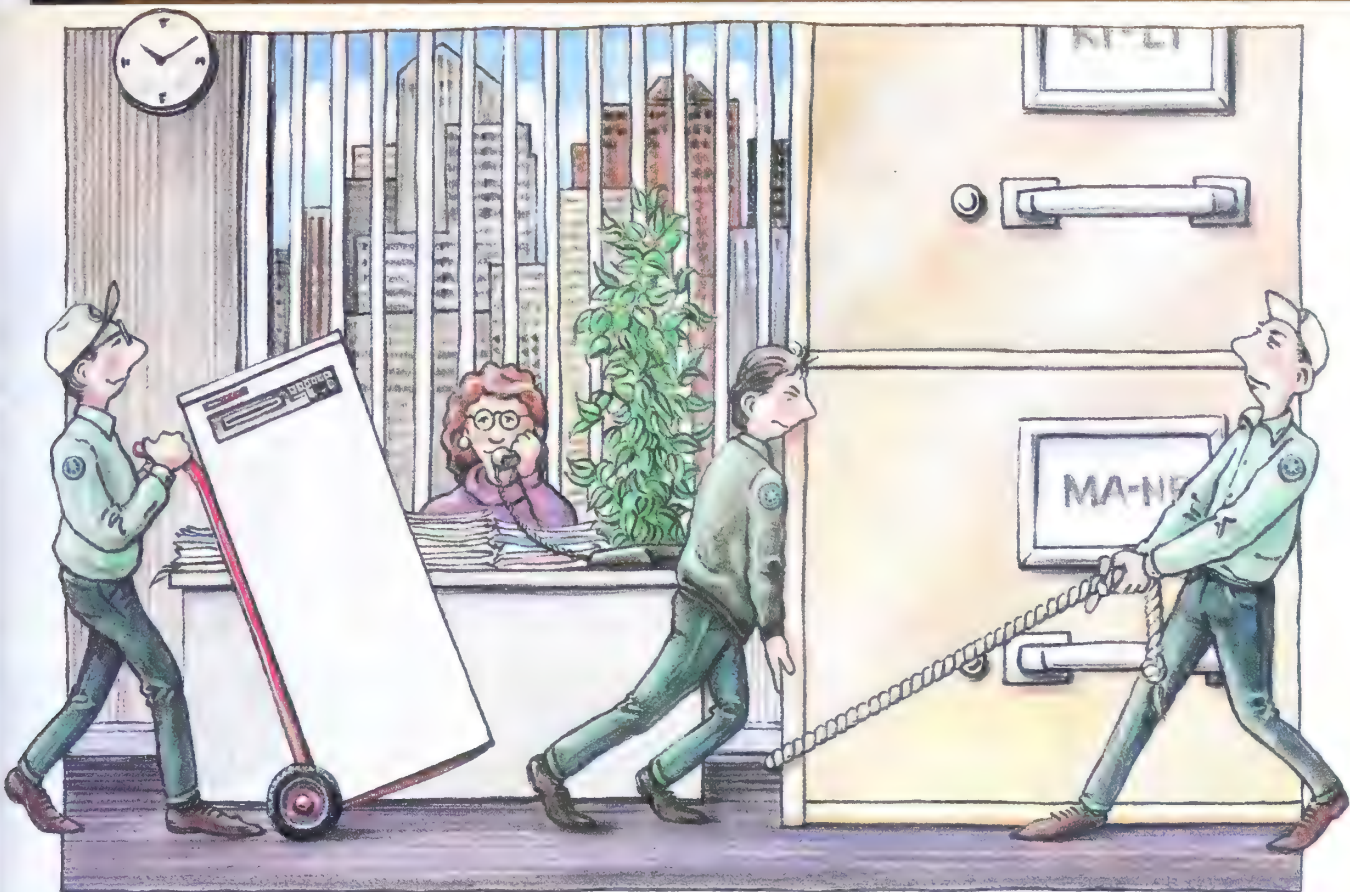
Some Americans say they are still shut out of the most important research—in industry labs

mer AEA fellow Anderson E. Howard, who worked on digital signal-processing technology at NEC Corp. in Japan. When he returned to the U.S. in 1985, he joined Hewlett-Packard Co. as a development engineer in the microwave instrumentation division. "HP hasn't gone out of its way to utilize my Japan experience or language skills," says Howard, who thinks he could contribute more as a company resource on technical data published in Japanese.

CERAMIC STARS. Sending a scientist to Japan, however, paid off brilliantly for at least one U.S. company. In 1986, DuPont Corning Corp. ceramics expert Ronald Baney was working at Nagoya University when IBM scientists in Zurich discovered high-temperature superconductor Baney and Nagoya University Professor Shin-ichi Hirono joined the worldwide race to exploit the new materials.

Together they developed a technique for making fibers and films of ceramic superconductors. The result was a patent, filed in Japan and the U.S., with Baney and Hirono as co-inventors. "It was an example of very rapid technology transfer," says Baney, who calls his stay in Japan "one of the most rewarding years of my life." That's an experience more American scientists are going to need if the U.S. wants to compete head-to-head with Japan.

By Amy Borrus in Tsukuba, with John Carey in Washington and bureau report



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FIRST-QUARTER PROFITS ROSE, BUT AT A SLOWER RATE. AND IT LOOKS AS IF

Forecasters are locked in a seemingly endless debate over whether the economy is slowing down. But the evidence on one count is already in, and it suggests the slowdown has indeed started. The signal comes from corporate profits. Even though they rose a respectable 15% over the previous year for the 900 companies in BUSINESS WEEK's Corporate Scoreboard, that's a marked deceleration. A year ago, first-quarter profits rose 22%. In last year's fourth quarter, they were up 28%.

Worse, all signs indicate that the slowdown will continue. "Profits will probably be at their best for the first quarter," says Abby Joseph Cohen, senior investment strategist at Drexel Burnham Lambert. "But rising business costs mean profit margins will not increase as easily as they have been."

Labor costs, including wages, benefits, and Social Security taxes, will be the biggest strain on future corporate performance. Interest rates and energy costs are also headed up. The squeeze on margins will probably lead to the end of double-digit profit growth before the year is over.

DRAWING EXPORTS. Other economic factors are eating away at profits. The export boom that has fueled growth in chemicals, paper, and aluminum is slowing now that the dollar has stabilized. Also, companies have milked just about the last benefit from the tax changes that gave 1988 earnings such a boost.

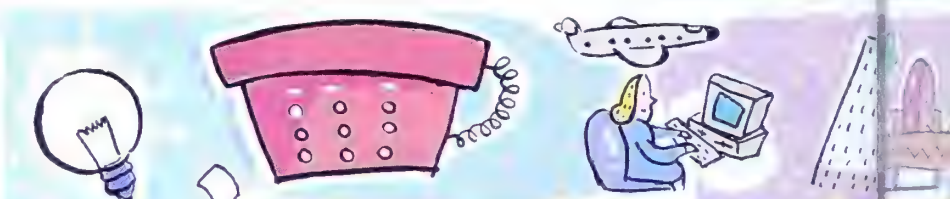
Manufacturing companies continued to fuel this quarter's growth. Profits for the general manufacturing sector grew by 36%, and thanks to continued high capacity, there has been a boost in such manufacturing-dependent industries as trucking and shipping. Carolina Freight and Preston, for example, had runaway growth in the first quarter thanks to increased tonnage levels and higher prices. But manufacturers may soon be dropping down a notch or two in the profit rankings. "New order growth is slowing, and demand is weakening," says Jason Benderly, co-director of economic research at Goldman Sachs.

In fact, some industries are already braced for earnings declines. The automotive group posted a 25% increase, but Ford Motor executives recently warned

that the company would probably not show profit increases in 1989 because of increased marketing and production costs and lower U.S. sales volume. The industry total does not include Chrysler, which later reported a first-quarter profit increase of 48%.

The auto companies mirror the trend

among less pricey consumer goods. With the personal savings rate now up to its highest level since May, 1985, Americans' reluctance to open their wallets is afflicting plenty of corporate bottom lines. Appliances and home furnishings, for instance, showed a slight decline in profits. The miscellaneous sector of the



WINNERS AND LOSERS

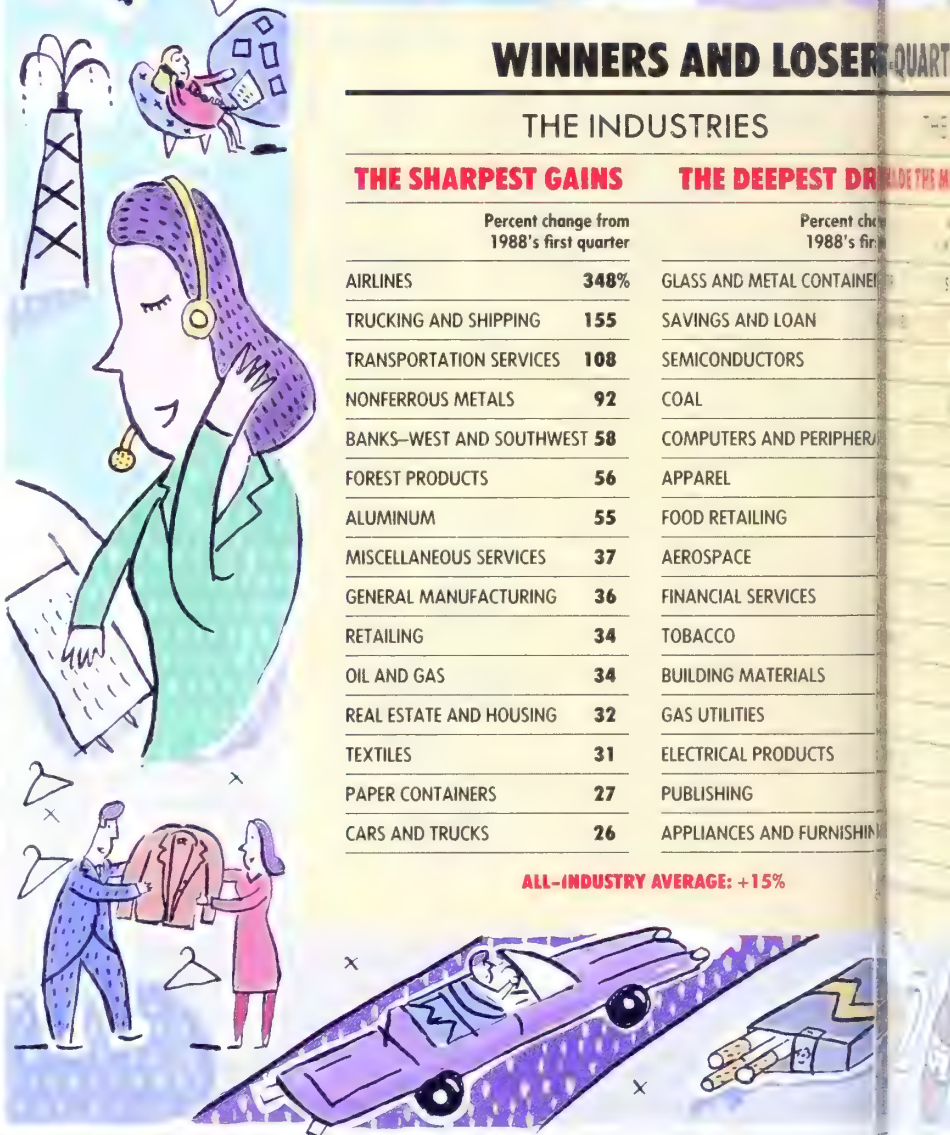
THE INDUSTRIES

THE SHARPEST GAINS

THE DEEPEST DROPS

	Percent change from 1988's first quarter		Percent change from 1988's first quarter
AIRLINES	348%	GLASS AND METAL CONTAINERS	-15%
TRUCKING AND SHIPPING	155	SAVINGS AND LOAN	-12%
TRANSPORTATION SERVICES	108	SEMICONDUCTORS	-10%
NONFERROUS METALS	92	COAL	-8%
BANKS—WEST AND SOUTHWEST	58	COMPUTERS AND PERIPHERALS	-7%
FOREST PRODUCTS	56	APPAREL	-6%
ALUMINUM	55	FOOD RETAILING	-5%
MISCELLANEOUS SERVICES	37	AEROSPACE	-4%
GENERAL MANUFACTURING	36	FINANCIAL SERVICES	-3%
RETAILING	34	TOBACCO	-2%
OIL AND GAS	34	BUILDING MATERIALS	-1%
REAL ESTATE AND HOUSING	32	GAS UTILITIES	-1%
TEXTILES	31	ELECTRICAL PRODUCTS	-1%
PAPER CONTAINERS	27	PUBLISHING	-1%
CARS AND TRUCKS	26	APPLIANCES AND FURNISHINGS	-1%

ALL-INDUSTRY AVERAGE: +15%



THE BEST OF TIMES

EARNINGS SLOWDOWN MAY NOT STOP ANYTIME SOON

sure industry, where profits were up % this time a year ago, grew only 4% er the past year.

This quarter's Corporate Scoreboard, mpiled by Standard & Poor's Comput Services, was peppered with some amatic comings and goings. Only 3 of e top 15 industry performers in the

first quarter last year made a repeat appearance this year. Aluminum, nonferrous metals, and paper containers continued to benefit from increased demand and higher prices.

Airlines, one of last year's worst-performing industries, sprang to the top of the list of sharpest gains. The industry

posted a 348% profit increase as companies such as UAL and Delta Air Lines felt the positive effects of declines in fuel prices and the end of the fare wars. However, the jump in industry profits doesn't count the \$255 million loss at Texas Air, whose results were too late to be included in the computations.

Meanwhile, plenty of last year's leaders turned into this year's laggards. Expenses from the \$25 billion leveraged buyout of RJR Nabisco helped hit the tobacco industry with a deep drop in profits. The semiconductor industry also went from riches to rags. A chip shortage drove up prices and profits last year, but this year many companies got stuck with too much inventory as they tried to catch up with demand.

BACK IN THE STORES. The Scoreboard is not without its ironies. Apparel manufacturers posted some of the weakest profits, while discount and fashion retailers weighed in with some of the biggest gains. "Usually, the results in both industries tend to be pretty parallel," says Carl E. Steidtmann, vice-president and chief economist at Management Horizons, the retail consulting division of Price Waterhouse. Currently, retail profits are healthy because women are finally back in the stores after they were turned off by confusing fashions and higher prices last year. And retailers have been immune to the squeeze on apparel producers that are still fighting import restrictions and rising textile prices.

Companies can take some heart from the slowdown in profits, since the rising stock market seems somewhat indifferent so far. True, investors have been especially tough on companies with negative surprises. When IBM announced earlier that earnings estimates were too high, the stock price tumbled from \$118 to \$109 per share over a two-day period. The problem, said IBM, stemmed from flaws in its new memory chips. By the time IBM announced its meager profit increase of 2% for the first quarter, the market accepted the report with nary a ripple. As profits wind down, more companies may find that the best they can do is make sure their bad tidings are not surprising as well.

By Walecia Konrad in New York

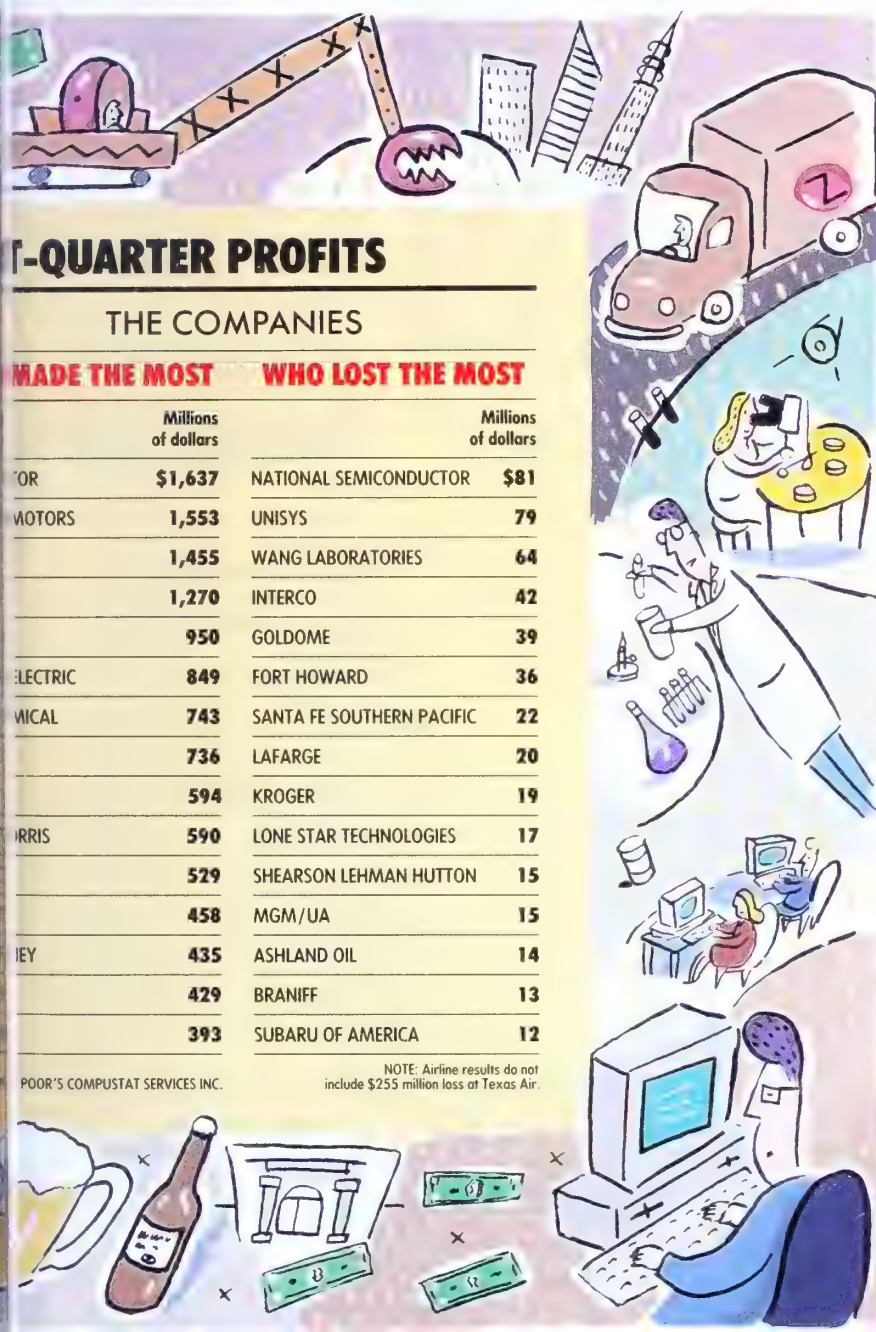
1-QUARTER PROFITS

THE COMPANIES

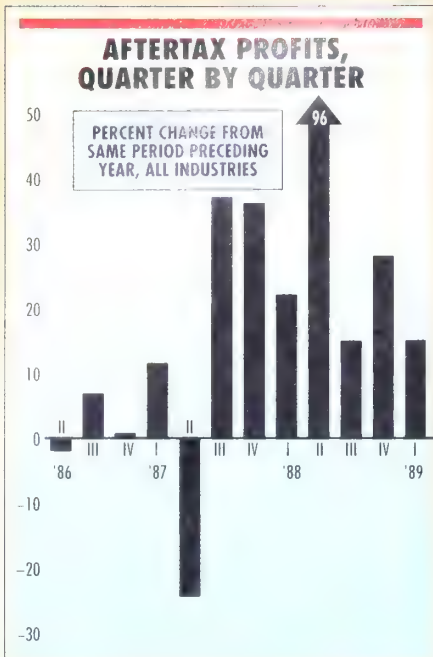
MADE THE MOST		WHO LOST THE MOST	
	Millions of dollars		Millions of dollars
OR	\$1,637	NATIONAL SEMICONDUCTOR	\$81
MOTORS	1,553	UNISYS	79
	1,455	WANG LABORATORIES	64
	1,270	INTERCO	42
	950	GOLDOME	39
ELECTRIC	849	FORT HOWARD	36
MICAL	743	SANTA FE SOUTHERN PACIFIC	22
	736	LAFARGE	20
	594	KROGER	19
RRIS	590	LONE STAR TECHNOLOGIES	17
	529	SHEARSON LEHMAN HUTTON	15
	458	MGM/UA	15
HEY	435	ASHLAND OIL	14
	429	BRANIFF	13
	393	SUBARU OF AMERICA	12

NOTE: Airline results do not include \$255 million loss at Texas Air.

POOR'S COMPUSTAT SERVICES INC.

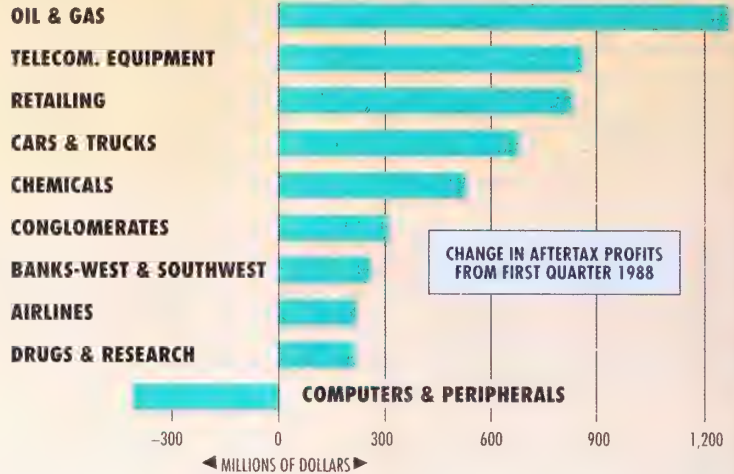


A SPOTLIGHT ON FIRST-QUARTER PROFITS



INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

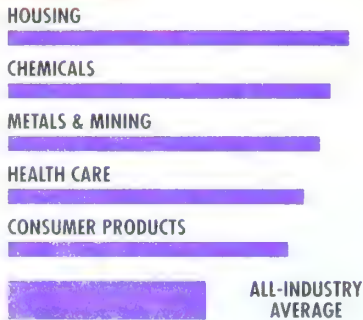
In 1989's first quarter, profits continued to climb. These industry groups had the biggest impact on that \$6.4 billion increase.



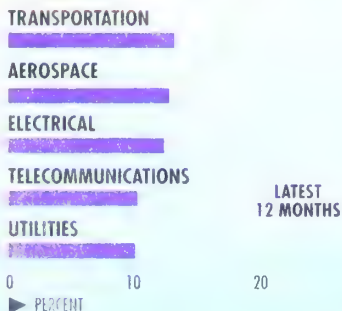
A LOOK AT PROFITS FROM THE INVESTOR'S PERSPECTIVE

RETURN ON EQUITY

THE HIGHEST



THE LOWEST

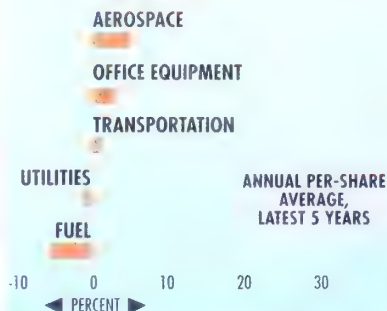


EARNINGS GROWTH

THE HIGHEST

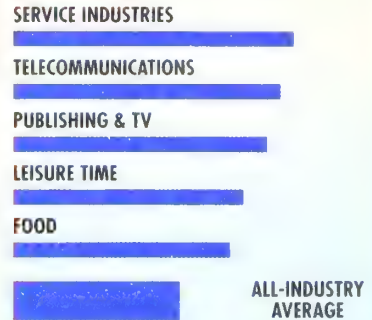


THE LOWEST

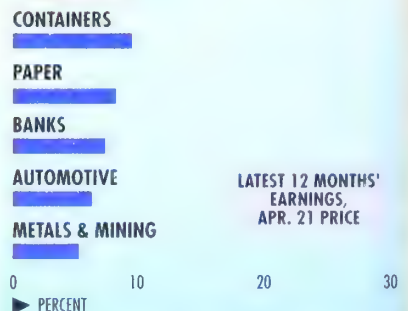


PRICE-EARNINGS RATIO

THE HIGHEST



THE LOWEST



DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

CORPORATE SCOREBOARD

FIRST QUARTER 1989

GLOSSARY

Sales: Includes all sales and other operating revenues. For banks, includes all operating revenues.

Profits: Net income before extraordinary items and discontinued operations. For banks, profits are net income after security gains or losses.

Margins: Net income before extraordinary items as percent of sales.

Return on invested capital: Ratio of net income before extraordinary items and

discontinued operations, plus minority interest and interest expenses adjusted by tax rate (all for most recent 12 months), to latest available total funds invested in company.

Return on common equity: Ratio of net available for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, retained earnings.

Price-earnings ratio: Based on Apr. 21 stock price and earnings for latest 12 months.

Growth in common equity: Annual percentage growth in common equity for latest 5-year period.

Growth in earnings per share: Annual percentage growth in earnings per share, including all common stock equivalents for latest 5-year period.

Market value: Latest available shares outstanding times stock price on Apr. 21, 1989.

Earnings per share: For latest 12 months; includes all common stock equivalents.

COMPANY	SALES		PROFITS		MARGINS		RETURN		5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %		
ALL-INDUSTRY COMPOSITE	790482	11	48547	15	6.1	5.9	11.8	15.5	13	7	8	2117566	3.11
AEROSPACE													
INDUSTRY COMPOSITE	20797.1	1	562.2	-10	2.7	3.0	11.2	12.6	12	11	5	33630	4.23
Boeing	4001.0	10	161.0	18	4.0	3.7	11.2	11.8	17	12	3	11186	4.18
GenCorp (1)	453.0	13	8.0	-38	1.8	3.3	16.0	49.5	11	NA	24	563	1.58
General Dynamics	2360.9	-2	75.4	-12	3.2	3.5	11.9	18.1	7	10	10	2371	8.32
Grumman	203.6**	7	6.8	4	3.4	3.4	10.2	14.3	10	15	12	247	1.43
Lockheed	1995.0	-17	63.0	-42	3.2	4.5	15.1	16.0	7	24	11	2715	6.67
Martin Marietta	1316.4	2	59.2	16	4.5	3.9	16.4	26.3	7	13	14	2403	6.18
McDonnell Douglas	3337.0	1	-10.0	NM	NM	1.5	10.6	8.7	12	9	3	3366	7.55
Northrop	1280.7	-6	9.7	116	0.8	0.3	NM	-2.6	NM	11	NA	1284	-0.54
Parker Hannifin (6)	654.0	14	27.3	0	4.2	4.8	10.1	12.2	12	13	16	1304	2.23
Rockwell International (5)	251.2	14	9.1	19	3.6	3.5	11.5	8.8	17	21	-4	579	1.97
Sundstrand	377.1	8	26.3	238	7.0	2.2	NM	-7.1	NM	1	NA	1123	-1.89
Talley Industries	102.5	46	2.7	45	2.6	2.6	6.9	7.0	15	8	-5	130	0.94
United Technologies	4464.8**	3	123.7	1	2.8	2.8	13.2	13.7	10	7	-9	6358	5.06
AUTOMOTIVE													
INDUSTRY COMPOSITE	70848.6	11	3668.5	25	5.2	4.6	10.6	17.5	6	12	10	69867	5.82
CARS & TRUCKS GROUP COMPOSITE	60265.1	11	3283.6	26	5.4	4.8	10.9	18.8	5	15	11	53869	7.58
Federal Signal	96.5	11	4.8	31	5.0	4.2	16.7	17.0	13	7	20	256	1.93
Ford Motor	25869.0	12	1637.0	1	6.3	7.0	16.1	24.7	4	23	25	24049	11.08
General Motors	32353.4	11	1553.0	79	4.8	3.0	8.3	14.9	5	11	0	26279	7.99
Navistar International (2)	956.4	4	37.4	-37	3.9	6.5	29.8	32.6	7	NA	NA	1391	0.80
Oshkosh Truck (3)	109.4	26	4.1	9	3.7	4.3	13.1	13.4	8	36	17	126	1.77
Paccar	880.3	17	47.3	19	5.4	5.3	19.1	20.3	10	7	23	1768	5.13
PARTS & EQUIPMENT GROUP COMPOSITE	6839.4	12	262.1	17	3.8	3.7	6.3	6.0	29	7	5	11107	0.85
Arvin Industries	383.4	21	2.8	NM	0.7	NM	6.1	8.4	13	16	-5	401	1.60
Cummins Engine	919.3	15	19.5	161	2.1	0.9	NM	-10.1	NM	3	NA	734	-5.59
Dana	1379.2	7	38.9	11	2.8	2.7	14.6	17.0	10	-6	8	1666	4.09
Dana Corp.	195.0**	8	11.4	13	5.9	5.6	15.4	26.6	10	51	106	428	1.71
Donaldson (5)	97.6	14	2.5	-34	2.6	4.4	13.2	15.6	10	4	12	170	1.71
Flagstar Industries (1)	192.2	9	27.6	165	14.3	5.9	NM	NM	NM	-5	NA	146	-41.93
Johnson	957.7	12	63.3	5	6.6	7.0	14.5	19.9	9	1	15	2036	6.22
Michelin (4)	344.9	13	12.5	1	3.6	4.1	8.7	10.1	14	25	4	926	1.17
Federal-Mogul	288.7	-3	4.7	-47	1.6	3.0	9.6	10.8	16	3	-5	634	3.10
P. Industries	108.4	14	3.2	-12	3.0	3.9	5.4	9.2	16	74	16	178	1.03
Masco Industries	488.8	21	21.0	-32	4.3	7.6	7.8	19.6	11	40	62	768	0.83
Peapack-Gladstone, Moe & Jack (11)	168.1	18	10.1	20	6.0	5.9	9.3	14.1	22	27	17	813	0.68
Smith (A. O.)	274.4	10	5.7	34	2.1	1.7	6.4	5.7	10	11	-7	169	2.06
PX	164.0	23	7.7	1	4.7	5.7	8.9	12.8	11	8	2	475	3.59
Standard Motor Products	95.6	-2	3.6	25	3.7	2.9	8.5	6.6	22	9	-11	219	0.76

First quarter ending Feb. 28. (2) First quarter ending Jan. 31. (3) Second quarter ending Mar. 31. (4) Second quarter ending Feb. 28. (5) Second quarter ending Jan. 31. (6) Third quarter ending Mar. 31. (7) Third quarter ending Feb. 28. (8) Third quarter ending Jan. 31. (9) Fourth quarter ending Mar. 31. (10) Fourth quarter ending Feb. 28. (11) Fourth quarter ending Jan. 31. Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues from some major subsidiaries are not included in consolidated sales; parent's share of earnings is included in profits. NA = not available. NM = not meaningful. Earnings per share are for latest 12 months, not necessarily for end of most recent fiscal year; includes all common stock equivalents but exclude extraordinary items.

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

The new COMPAQ DESKPRO 286e.
Further proof that what's on the outside,



says a lot about what's on the inside.

Compaq has earned a reputation for building the most powerful and reliable personal computers in the world.

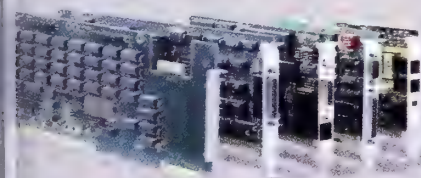
Credit this to the engineers at Compaq who work to make sure that you have the exact combination of features needed to

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Built-in interfaces mean you can connect a mouse, printer, modem or other tools without taking up a slot.

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Need room to grow? Four industry-standard expansion slots let you add extra capabilities to do things like swap information with other PC's. Work over the phone. Even get on speaking terms with a mainframe.

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Simply translated, the COMPAQ DESKPRO 286e has the features

You'll get the flexibility to use both 5 1/4- and 3 1/2-inch diskette drives, along with a wide variety of fixed disk drives and tape drives.



and compatibility to easily run the spreadsheets, reports and other work you do:

And it can just as easily run on a network, so you can share your ideas with everyone.

It's this kind of attention to detail that's made

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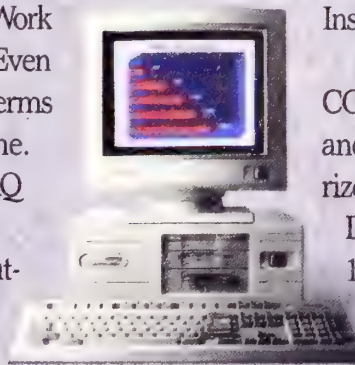
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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTH EARNING PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %			
Standard Products (6)	143.3	7	9.1	-12	6.3	7.7	19.4	21.3	9	19	20	305	3.08	
Sudbury (7)	154.6**	15	-0.9	NM	NM	2.5	NA	-2.5	NM	213	56	83	-0.13	
Trinova	484.3	16	19.5	7	4.0	4.4	11.6	13.0	11	7	12	957	2.56	
(c) TIRE & RUBBER														
GROUP COMPOSITE	3744.7	6	122.8	5	3.3	3.3	10.4	17.0	10	-7	14	4891	4.48	
Bandag	114.3	9	15.5	9	13.6	13.5	40.1	44.9	15	0	19	1047	4.80	
Carlisle	143.1	3	6.1	24	4.3	3.6	9.8	9.7	18	2	-6	328	2.31	
Cooper Tire & Rubber	195.5	21	10.3	51	5.3	4.2	13.2	17.3	12	13	12	524	2.17	
Goodyear Tire & Rubber	2642.9	4	94.5	-1	3.6	3.8	9.1	17.2	8	-10	16	2814	6.08	
TBC	111.3	4	3.4	7	3.0	2.9	24.2	22.5	11	13	35	178	1.50	
Uniroyal Goodrich Tire	537.6	11	-7.0	NM	NM	NM	NA	-2.0	NA	NA	NA	NA	NA	
3 BANKS														
INDUSTRY COMPOSITE	47405.5	16	3826.4	13	8.1	8.3	19.5	17.0	7	13	12	103225	4.52	
(a) BANKS - EAST														
GROUP COMPOSITE	27185.9	17	1971.5	2	7.3	8.3	20.7	18.3	6	13	11	49073	5.59	
Bank of Boston	1405.0	14	89.1	6	6.3	6.9	NA	16.7	6	13	-17	1832	4.65	
Bank of New England	909.5	23	42.3	-36	4.7	8.9	24.7	15.8	6	52	7	1479	3.70	
Bankers Trust New York	1694.3	29	164.3	30	9.7	9.6	28.8	19.6	5	16	-32	3569	8.50	
BayBanks	266.6	23	20.8	-1	7.8	9.7	19.0	15.6	8	19	16	697	5.54	
Chase Manhattan	3214.4	14	131.9	-52	4.1	9.8	22.3	20.4	4	5	18	3261	9.74	
Chemical Banking	1935.4	5	117.9	-6	6.1	6.8	25.4	22.4	3	7	14	2335	11.56	
Citicorp	8598.0	18	529.0	48	6.2	4.9	20.6	21.3	6	9	8	9532	5.38	
CoreStates Financial	451.3	19	48.2	16	10.7	10.9	19.3	16.4	10	18	9	1765	4.66	
Fleet/Norstar Financial Group	854.6	18	92.4	16	10.8	11.0	16.9	17.9	9	48	8	3035	3.16	
KeyCorp	390.2	21	31.0	15	7.9	8.4	14.2	13.6	8	27	7	972	2.93	
Manufacturers Hanover	772.0	-10	103.0	-8	13.3	13.1	16.2	24.8	3	1	12	1841	14.09	
Mellon Bank	380.0	2	53.0	112	13.9	6.7	NM	-9.4	NM	-11	NA	957	-3.15	
Midlantic	533.3	27	59.5	15	11.2	12.4	22.6	18.0	7	40	3	1643	6.01	
MNC Financial	543.1	21	47.5	61	8.7	6.6	25.7	16.9	7	30	20	1408	6.40	
Morgan (J. P.)	2508.1	25	179.6	-36	7.2	14.0	23.0	16.0	8	12	-6	6776	4.82	
PNC Financial	1121.3	20	123.6	10	11.0	12.0	31.5	18.1	8	29	8	3764	5.16	
Republic New York	583.3	24	41.8	11	7.2	8.0	10.9	13.8	8	17	-9	1303	5.11	
Shawmut National	736.2	15	64.7	19	8.8	8.5	24.7	15.1	7	52	3	1867	3.38	
United Jersey Banks	289.4	19	31.9	10	11.0	11.9	NA	15.5	9	42	9	1038	2.65	
(b) BANKS - MIDWEST														
GROUP COMPOSITE	5528.3	15	582.0	16	10.5	10.4	18.8	14.2	10	12	-4	16730	3.03	
Banc One	744.4	17	87.2	8	11.7	12.6	21.4	17.1	9	33	12	3215	2.66	
Boatmen's Bancshares	358.5	6	30.9	10	8.6	8.3	NA	NA	17	43	3	1148	1.98	
Comerica	301.3	21	27.4	2	9.1	10.8	16.7	17.8	7	8	16	770	6.81	
Continental Bank	292.5	7	75.6	10	25.8	25.0	39.2	28.2	4	-9	-13	895	5.33	
First Bank System	619.1	9	50.3	44	8.1	6.1	NM	-34.3	NM	8	-8	1422	-4.96	
First of America Bank	252.1	22	26.9	44	10.7	9.0	NA	NA	6	27	16	497	6.67	
Huntington Bancshares	241.1	14	23.1	11	9.6	9.8	21.3	15.8	8	19	12	735	2.39	
Manufacturers National	268.0	24	24.8	13	9.3	10.1	25.1	17.3	7	13	-17	708	6.57	
National City	611.3	17	62.4	16	10.2	10.3	22.7	18.3	9	24	11	2080	3.99	
NBD Bancorp	605.1	17	63.5	21	10.5	10.1	20.4	15.8	8	14	15	2003	5.04	
Northern Trust	287.9	24	25.4	28	8.8	8.6	NA	26.3	7	2	42	755	6.85	
Norwest	674.6	14	57.0	14	8.5	8.5	18.4	18.5	8	2	17	1699	4.64	
Society	272.4	19	27.4	19	10.0	10.1	18.2	15.4	8	20	13	804	4.37	
(c) BANKS - SOUTH & SOUTHEAST														
GROUP COMPOSITE	5730.0	16	569.5	11	9.9	10.4	23.0	15.6	9	28	8	19964	3.35	
Barnett Banks	720.8	18	62.4	15	8.7	8.9	NA	16.1	9	28	12	2077	3.86	
Citizens & Southern	574.1	16	57.8	19	10.1	9.8	23.0	16.9	10	29	9	2132	3.38	
Crestar Financial	104.6	-23	23.6	12	22.6	15.6	23.0	14.2	9	15	4	753	3.03	
First Union	787.8	14	72.2	-7	9.2	11.2	25.6	14.9	9	42	8	2535	2.73	
First Wachovia	574.6	22	67.3	14	11.7	12.5	23.9	16.2	10	27	8	2509	4.43	
NCNB	814.3	17	75.8	8	9.3	10.1	25.6	12.8	12	25	7	3119	2.90	
Signet Banking	316.3	9	31.5	17	10.0	9.3	31.5	23.1	6	28	1	941	5.82	
Southeast Banking	405.1	23	33.1	42	8.2	7.1	13.5	11.5	10	10	-3	839	2.65	
Sovran Financial	625.2	18	61.9	13	9.9	10.4	21.1	17.5	9	31	7	2107	4.20	
SunTrust Banks	807.1	19	84.0	11	10.4	11.1	19.2	NA	8	34	10	2953	2.76	
(d) BANKS - WEST & SOUTHWEST														
GROUP COMPOSITE	8961.4	16	703.4	58	7.9	5.8	12.6	16.0	8	4	-9	17458	4.50	
BankAmerica	2737.0	17	208.0	134	7.6	3.8	14.3	17.6	7	-9	NA	4546	3.33	
First City Bancorp. of Texas	267.3	0	26.2	NM	9.8	NM	NA	9.0	9	NA	NA	400	3.14	
First Interstate Bancorp	1561.6	13	94.3	8	6.0	6.3	2.0	5.1	23	5	NA	2242	2.15	
Security Pacific	2350.5	20	179.3	22	7.6	7.5	15.5	18.4	7	15	-37	4777	5.83	
U. S. Bancorp	379.0	18	35.2	23	9.3	8.9	15.9	13.8	9	15	10	1136	3.18	
Valley National	309.2	11	19.0	37	6.1	5.0	11.7	11.7	8	7	2	575	3.67	
Wells Fargo	1356.9	18	141.5	18	10.4	10.4	NA	23.3	8	14	0	3783	9.61	

Footnotes on page 67

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4/21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4:21	COMMON EQUITY	EARNINGS PER SHARE			
CHEMICALS														
INDUSTRY COMPOSITE	33276.5	11	3125.9	20	9.4	8.7	16.1	25.3	9	2	23	104756	5.79	
Arco Chemical	699.0	20	116.0	7	16.6	18.5	28.1	36.5	7	NA	NA	3552	5.14	
Air Products & Chemicals (3)	668.9	8	56.6	2	8.5	9.0	11.1	16.5	10	3	4	2257	4.02	
American Cyanamid	1231.6	7	89.0	12	7.2	6.9	14.6	15.3	15	5	15	4759	3.52	
Aristech Chemical	275.2	6	26.5	-50	9.6	20.2	26.9	33.7	6	NA	NA	771	3.50	
Betz Laboratories	124.4	18	13.2	18	10.6	10.6	19.7	21.8	16	7	7	811	3.27	
Cabot (3)	540.9	16	29.0	58	5.4	3.9	8.8	13.6	21	-3	-4	1164	2.04	
Cellex	217.8	4	11.4	-5	5.2	5.8	10.3	12.8	18	11	8	705	1.58	
Cow Chemical	4485.0	13	743.0	47	16.6	12.7	25.8	36.5	7	7	57	17550	14.23	
Du Pont	8674.0	10	736.0	25	8.5	7.5	11.8	NA	11	6	13	26578	9.74	
Engelhard	587.3	15	14.4	7	2.4	2.6	7.4	8.5	15	12	0	945	1.44	
Eastman Chemical	729.1	12	56.4	6	7.7	8.2	NA	NA	13	7	24	2956	1.94	
Eastman Mississippi (6)	118.2	90	8.6	594	7.3	2.0	15.4	16.7	11	2	15	347	1.61	
Eastman-Kodak	470.8	8	69.9	35	14.9	11.9	16.6	38.2	8	1	22	2493	4.39	
Eastman-Kodak (H. B.) (1)	177.6	15	1.9	-59	1.1	3.1	8.4	10.2	14	15	13	253	1.91	
Eastman-Kodak (G. F.)	317.8	43	55.4	43	17.4	17.4	64.5	82.1	6	91	89	1018	7.53	
Eastman-Kodak (B. F.)	639.0	16	53.0	30	8.3	7.4	17.2	20.6	6	-3	40	1320	8.47	
Eastman-Kodak (W. R.)	1397.2	8	30.3	9	2.2	2.1	9.6	12.6	14	-10	4	2664	2.29	
Eastman-Kodak American Management (5)	338.6**	59	-8.3	NM	NM	NM	6.5	10.6	13	8	-33	225	1.92	
Eastman-Kodak Chemical†	158.1**	4	28.6	19	18.1	15.8	20.5	22.4	11	28	24	1151	6.20	
Eastman-Kodak (M. A.)†	256.4	7	13.8	6	5.4	5.4	15.3	20.4	8	-5	NA	568	3.51	
Eastman-Kodak (C. R.)	681.6	3	43.2	9	6.3	6.0	5.8	6.1	18	12	11	2161	2.65	
Eastman-Kodak (2)	443.4	8	78.6	0	17.7	19.3	25.3	NA	NA	NA	NA	2703	NA	
Eastman-Kodak Fertilizer Group (6)	322.6	11	38.8	41	12.0	9.5	14.0	18.1	8	NA	NA	1117	5.19	
Eastman-Kodak Minerals & Chemical (6)	258.4	-20	23.9	112	9.3	3.5	6.9	8.3	13	NA	-30	957	3.20	
Eastman-Kodak (6)	116.4	7	14.1	35	12.1	9.6	22.1	23.0	15	10	18	745	2.86	
Eastman-Kodak (6)	345.2	17	30.7	29	8.9	8.0	18.8	20.8	11	8	13	1497	3.61	
Eastman-Kodak (6)	2265.0	6	222.0	6	9.8	9.9	12.4	15.9	11	1	10	6728	8.65	
Eastman-Kodak Thiokol (6)	708.7	17	0.5	-99	0.1	6.9	9.0	10.5	19	14	13	2250	2.48	
Eastman-Kodak Chemical	249.5	6	25.1	1	10.1	10.6	18.0	NA	14	7	7	1451	2.72	
Eastman-Kodak (6)	671.0	18	34.0	16	5.1	5.1	11.0	15.1	11	-5	5	1076	4.96	
Eastman-Kodak (6)	279.9	6	28.5	66	10.2	6.5	17.2	25.4	21	-10	16	1023	6.08	
Eastman-Kodak Chemical	814.1	9	71.4	-25	8.8	12.8	36.8	-82.6	4	0	42	1203	13.37	
Eastman-Kodak (9)	173.7	5	24.5	-16	14.1	17.7	33.8	59.1	4	NA	NA	518	4.00	
Eastman-Kodak (A. & Haas)	679.5	10	53.1	-15	7.8	10.0	16.2	18.3	10	5	12	2163	3.33	
Eastman-Kodak (A. & Haas) (4)	159.8**	10	7.2	17	4.5	4.2	17.1	18.7	13	22	22	382	2.21	
Eastman-Kodak Chemicals (3)	161.9	-14	31.7	-50	19.6	33.8	92.9	136.0	4	NA	NA	840	3.26	
Eastman-Kodak Carbide	2241.0	15	201.0	99	9.0	5.2	19.5	41.5	5	-26	46	4145	6.00	
Eastman-Kodak Chemical (3)	198.5	-8	32.5	12	16.4	13.4	36.2	104.5	7	NA	NA	874	8.02	
Eastman-Kodak (6)	399.5	1	20.3	138	5.1	2.2	10.5	14.4	11	11	3	837	3.52	
CONGLOMERATES														
INDUSTRY COMPOSITE	34692.2	8	2334.3	15	6.7	6.3	14.7	17.4	12	6	11	105003	3.63	
Allied-Signal	2942.0	0	126.0	13	4.3	3.8	11.7	14.6	10	4	-10	4920	3.20	
Allied-Signal International	324.0	18	14.7	10	4.5	4.9	12.0	17.3	10	17	19	676	8.96	
Allied-Signal Industries	246.7	29	5.1	-93	2.1	40.1	1.4	0.3	NM	24	13	614	0.05	
Allied-Signal Electric	11900.0	13	849.0	17	7.1	6.9	19.0	19.0	12	NA	7	43640	3.89	
Allied-Signal Host (11)	124.6	15	-0.4	NM	NM	0.3	NM	-2.6	NM	9	NA	174	-0.23	
Allied-Signal (11)	841.8	11	14.8	16	1.8	1.7	8.5	9.4	13	-3	5	1228	2.47	
Allied-Signal (11)	773.1	10	69.2	7	9.0	9.2	12.9	16.6	16	4	16	6259	3.25	
Allied-Signal Mining & Mfg.	3017.0	8	318.0	15	10.5	9.9	20.4	21.7	14	9	12	16068	5.30	
Allied-Signal (5)	118.3	13	11.8	6	10.0	10.6	16.4	16.9	20	22	15	1181	1.57	
Allied-Signal Central	343.1	1	92.7	352	27.0	6.1	9.3	9.4	11	4	-19	1758	2.35	
Allied-Signal International	620.7	5	22.4	-5	3.6	4.0	11.6	13.8	12	NA	NA	1186	2.98	
Allied-Signal International (3)	3162.0	4	270.7	24	8.6	7.2	20.1	22.1	7	9	17	5817	3.19	
Allied-Signal Shares (10)	212.0	15	3.7	-14	1.7	2.3	8.4	10.0	16	1	0	281	6.50	
Allied-Signal (10)	1116.3	2	70.5	-53	6.3	13.6	13.0	14.7	13	2	8	3922	27.54	
Allied-Signal (10)	1826.0	2	63.3	-7	3.5	3.8	4.9	11.2	9	NA	22	2358	3.06	
Allied-Signal (10)	1785.0	-1	69.0	5	3.9	3.7	12.0	16.8	10	-2	10	2721	4.33	
Allied-Signal (10)	4458.0*	11	296.0	89	6.6	3.9	11.7	16.5	11	0	-13	8742	3.18	
Allied-Signal (10)	881.5	15	37.8	49	4.3	3.3	10.5	21.0	19	-4	8	3460	1.73	
CONSUMER PRODUCTS														
INDUSTRY COMPOSITE	45180.0	18	2455.3	4	5.4	6.2	12.9	22.1	15	9	11	149035	3.21	
APPAREL														
GROUP COMPOSITE	4255.9	14	163.8	-18	3.8	5.4	14.6	26.4	12	14	6	9533	1.68	
Crown Group (11)	462.6	12	1.1	-93	0.2	3.8	8.0	8.5	20	-2	-4	612	1.74	
Crystal Brands	232.8	168	6.1	59	2.6	4.4	3.7	7.7	17	6	NA	262	1.73	
Unit of the Loom	282.0	34	7.7	166	2.7	1.4	12.3	30.2	8	NA	NA	608	1.26	
Artmarx (1)	327.4	8	9.8	10	3.0	2.9	9.7	10.9	13	5	-3	511	2.06	
Terco (10)	483.1	-3	-42.2	NM	NM	6.5	NA	NA	NM	4	4	101	-0.42	
Wellwood (8)	190.6	11	6.3	14	3.3	3.2	15.7	17.5	11	14	20	351	2.78	

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 40% \$ MIL.	MONTHS EARNING PER SHARE
	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988	MARGINS		ON INVESTED CAPITAL	ON COMMON EQUITY	PER 40%	COMMON EQUITY	EARNINGS PER SHARE		
					1ST QUARTER 1989	1ST QUARTER 1988							
Leslie Fay	203.4	20	9.6	64	4.7	3.5	14.6	19.4	10	NA	-6	262	1.36
Nike	464.7	40	48.8	77	10.5	8.3	37.6	33.2	9	10	13	1386	4.29
Oxford Industries	132.9	-4	1.1	NM	0.8	NM	NA	1.2	71	0	NA	113	0.16
Phillips-Van Heusen (11)	164.1	6	3.3	346	2.0	0.5	15.3	40.5	14	-17	12	167	1.36
Reebok International	488.5	8	49.4	3	10.1	10.5	18.2	20.1	11	204	94	1525	1.21
Russell	146.9	24	13.0	15	8.8	9.6	12.9	16.1	14	14	17	807	1.39
Stride Rite	114.1	32	11.6	73	10.1	7.7	26.2	29.5	14	5	28	558	2.89
VF	562.8	-6	38.3	4	6.8	6.2	14.5	16.0	13	25	7	2269	2.57
b APPLIANCES & HOME FURNISHINGS													
GROUP COMPOSITE	6069.9	25	263.6	-1	4.3	5.5	12.2	15.8	14	15	11	13032	1.77
Allegheny International (3)	268.3	5	-4.6	NM	NM	NM	NM	21.4	NM	NA	NA	14	-5.51
Armstrong World Industries	710.1	13	37.4	-4	5.3	6.2	12.9	16.0	11	11	22	1735	3.48
Circuit City Stores	563.5	22	30.2	27	5.4	5.1	20.5	28.6	15	50	49	1065	3.05
Highland Superstores (11)	315.9	17	4.4	21	1.4	1.3	5.7	5.5	16	85	-34	114	0.40
InterTan (6)	178.3	16	12.6	41	7.1	5.8	16.5	19.5	12	NA	NA	425	3.97
Kimball International (6)	152.7	17	8.4	-5	5.5	6.7	12.2	13.2	12	13	15	360	1.47
La-Z-Boy Chair (8)	134.8	16	5.4	-27	4.0	6.4	11.3	13.8	13	13	12	339	1.42
Leggett & Platt	237.1	28	11.4	12	4.8	5.5	11.8	15.9	11	22	13	436	2.28
Masco	659.0	10	68.2	-18	10.4	13.9	12.9	17.7	13	18	17	3506	2.00
Maytag	678.6	55	34.1	9	5.0	7.2	14.1	27.6	11	21	12	1455	1.71
Ohio Mattress (11)	158.2	13	5.5	42	3.5	2.8	9.2	13.3	24	41	15	836	1.06
Pier 1 Imports (10)	111.7	31	4.9	65	4.4	3.5	13.4	19.6	18	21	19	382	0.70
SSMC	169.6**	0	-1.9	NM	NM	1.2	NM	-10.9	NM	NA	NA	206	-2.99
Toro (5)	156.2	2	6.9	15	4.4	3.9	14.7	22.9	11	8	27	212	2.00
Whirlpool	1576.1	48	40.7	10	2.6	3.5	12.4	12.5	12	6	1	1949	2.38
c BEVERAGES													
GROUP COMPOSITE	6254.4	6	537.9	23	8.6	7.4	14.9	22.5	16	11	14	35989	2.41
Anheuser-Busch	2205.1	6	167.1	10	7.6	7.4	13.8	23.5	15	12	18	10805	2.52
Brown-Forman (8)	273.0	0	57.9	103	21.2	10.5	18.5	26.5	13	1	8	1815	5.02
Coca-Cola	1985.2	6	259.8	23	13.1	11.3	28.5	35.5	18	2	16	18804	3.00
Coca-Cola Enterprises	859.6	0	13.5	4	1.6	1.5	6.6	8.9	16	51	NA	2159	1.01
Coors (Adolph)	324.1	13	-4.8	NM	NM	1.3	3.2	3.6	17	5	-9	660	1.05
General Cinema (2)	607.5	10	44.4	59	7.3	5.1	9.9	16.2	19	18	0	1746	1.35
d PERSONAL CARE													
GROUP COMPOSITE	10215.2	11	579.6	14	5.7	5.5	14.2	20.0	15	4	2	32888	3.57
Alberto-Culver (3)	180.6	19	6.3	27	3.5	3.2	17.2	19.2	18	18	44	494	2.05
Avon Products	704.9	13	6.2	2	0.9	1.0	14.8	42.1	17	-25	1	1354	1.52
Bausch & Lomb	276.3	30	19.2	16	7.0	7.8	14.7	16.0	16	19	13	1561	3.36
Chemed	141.9	42	5.3	17	3.8	4.6	12.3	19.3	15	9	-3	322	2.28
Clorox (6)	376.0	16	38.4	10	10.2	10.7	16.5	18.7	14	16	11	2006	2.58
Colgate-Palmolive	1203.6	5	67.2	30	5.6	4.5	11.7	14.7	20	-4	-34	3341	2.45
Ecolab	235.4	4	-7.7	NM	NM	NM	8.9	9.6	17	19	9	732	1.54
Gillette	941.0	4	77.6	3	8.2	8.3	21.0	NM	15	-6	8	3744	2.60
Helene Curtis Industries (10)	170.5**	25	4.2	62	2.5	1.9	NA	11.3	16	15	21	258	3.43
NCH (8)	149.6	13	9.4	20	6.3	5.9	16.8	17.9	11	2	19	379	3.89
Noxell	156.4	6	17.1	9	10.9	10.8	20.7	21.3	16	17	16	839	1.29
Procter & Gamble (6)	5430.0	12	310.0	18	5.7	5.4	12.8	17.0	14	6	-7	15990	6.95
Stanhome	119.0	3	8.4	9	7.1	6.7	28.7	26.1	13	12	36	529	2.00
Tambrands	129.9	-2	18.0	-14	13.9	15.7	23.2	23.4	16	15	11	1339	3.70
e TOBACCO													
GROUP COMPOSITE	18384.6	25	910.4	-5	5.0	6.5	11.4	24.8	14	9	17	57592	6.15
American Brands	3245.9*	4	172.2	11	5.3	5.0	13.6	21.8	12	6	9	6351	5.79
Culbro	230.1***	5	1.2	15	0.5	0.5	2.8	-0.7	NM	0	-35	161	0.13
Philip Morris	10770.0*	45	590.0	20	5.5	6.6	9.7	28.2	13	15	22	28994	9.61
RJR Nabisco	3981.0	5	103.0	-62	2.6	7.2	13.3	21.2	16	4	16	19460	5.27
UST	157.6*	9	44.0	19	27.9	25.5	32.5	37.3	16	12	18	2626	1.47
7 CONTAINERS & PACKAGING													
INDUSTRY COMPOSITE	4717.4	14	348.6	21	7.4	6.9	14.4	19.8	9	13	31	12645	3.85
a GLASS, METAL & PLASTIC													
GROUP COMPOSITE	1074.2	6	26.4	-25	2.5	3.4	6.6	9.8	19	8	12	2296	1.71
Anchor Glass Container	249.4	7	-4.1	NM	NM	0.6	NM	-18.0	NM	98	NA	149	-0.99
Ball	257.3	7	7.7	-37	3.0	5.1	5.8	6.7	23	10	-1	661	1.21
Constar International	135.7	6	3.6	11	2.6	2.5	10.2	14.6	13	1	6	147	1.95
Crown Cork & Seal	431.8	4	19.2	5	4.4	4.4	13.5	14.6	14	5	21	1337	3.44
b PAPER													
GROUP COMPOSITE	3643.1	17	322.2	27	8.8	8.1	16.2	22.7	8	14	36	10349	4.35
Bemis	265.1	8	7.8	16	2.9	2.7	12.0	17.2	18	7	28	673	1.53
Federal Paper Board	284.7	16	47.1	115	16.5	8.9	16.1	25.1	7	31	40	1076	4.14
Gaylord Container (3)	178.0	18	6.0	-41	3.4	6.7	11.7	28.0	4	NA	NA	189	2.94
Greif Bros.	105.1	13	5.2	-8	5.0	6.1	12.2	12.8	18	4	5	537	2.43

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CORPORATE SCOREBOARD

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN		5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4/21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4/21	COMMON EQUITY %	EARNINGS PER SHARE %		
Jefferson Smurfit	319.8	2	34.9	8	10.9	10.4	29.3	47.0	8	26	61	1201	3.79
Longview Fibre (2)	169.9	24	19.3	18	11.4	12.0	18.7	27.0	9	12	42	845	8.98
Lotlatch	297.4	15	35.9	36	12.1	10.3	10.6	17.7	8	4	34	938	4.39
Monoco Products	433.1	15	24.6	10	5.7	5.9	14.6	21.7	15	14	18	1513	2.25
Stone Container	1127.4	28	86.8	33	7.7	7.4	21.9	NA	5	33	112	1829	6.05
Temple-Inland	462.6	9	54.5	20	11.8	10.7	12.9	19.0	8	8	27	1548	7.48
DISCOUNT & FASHION RETAILING													
INDUSTRY COMPOSITE	70785.1	16	3232.1	34	4.6	3.9	13.1	14.9	16	12	9	109326	2.10
Alexander's (5)	172.5**	-11	17.2	927	10.0	0.9	13.5	18.2	16	8	NA	346	4.30
James Department Stores (11)	1771.0**	169	22.9	35	1.3	2.6	3.8	10.6	14	48	8	614	1.20
Kmart	102.5	5	6.3	-20	6.1	8.0	33.3	33.3	11	9	13	353	3.57
Kendall's (11)	113.5**	7	4.9	-25	4.3	6.2	4.2	2.1	48	NA	NA	62	0.16
Leighton Coat Factory (2)	278.7	23	21.5	18	7.7	8.0	12.6	12.9	10	17	9	248	2.13
Marion Pirie Scott (11)	345.1**	13	9.3	-26	2.7	4.1	6.4	0.2	NA	4	-4	319	0.02
Marshall Field's (5)	930.7**	7	21.9	8	2.4	2.4	8.6	-3.1	32	-26	20	204	0.28
Marmax Shoppes (11)	221.5	21	17.0	126	7.7	4.1	NA	17.9	19	29	28	731	0.76
Midland World (11)	408.4	5	22.9	25	5.6	4.7	7.6	6.8	15	NA	NA	186	1.10
ML Group (5)	120.8	13	7.2	13	6.0	6.0	9.9	16.3	11	22	20	133	1.92
Consolidated Stores (11)	215.8	12	14.2	56	6.6	4.7	12.0	16.5	14	NA	NA	317	0.50
Costco Wholesale (4)	696.8	46	9.1	38	1.3	1.4	10.2	15.5	35	56	NA	555	0.65
VN Companies (4)	192.3	17	6.7	4	3.5	3.9	6.1	6.5	30	114	32	256	0.49
Walton (B.) (2)	246.3	3	18.2	13	7.4	6.7	4.5	2.5	NA	NA	NA	NA	NA
Wayton Hudson (11)	4100.0**	11	183.0	37	4.5	3.6	10.0	15.2	14	9	3	3889	3.45
Willard Department Stores (11)	882.0**	13	65.7	32	7.4	6.4	13.2	16.6	16	38	23	1788	3.53
Woolco General (11)	190.0	0	6.2	17	3.3	2.8	8.8	9.4	18	12	-17	185	0.55
Family Dollar Stores (4)	195.5	9	7.8	-16	4.0	5.2	14.9	15.5	11	20	9	295	0.96
Wal-Mart (11)	423.7	18	32.2	49	7.6	6.0	25.7	29.1	21	25	35	1495	2.05
Wendco (11)	128.8	14	9.5	28	7.4	6.6	12.3	13.4	8	3	NA	130	0.76
Wendell's (4)	134.7	-1	16.2	44	12.0	8.2	NA	-3.4	NA	-5	NA	251	-0.71
Wendell's (11)	113.5	8	11.0	138	9.7	4.4	NA	4.3	23	26	NA	41	0.30
Wendell's (11)	219.6	8	-7.4	NA	NA	NA	13.4	14.7	16	NA	NA	232	0.57
Wendell's (11)	245.9	43	12.9	19	5.2	6.3	10.7	13.8	14	33	20	659	1.30
Wendell's (11)	573.4	13	24.9	1	4.3	4.8	10.0	-45.4	19	NA	NA	151	0.41
Wendell's (11)	524.8	40	18.9	18	3.6	4.3	16.6	20.0	27	63	39	1988	1.50
Wendell's (11)	207.6	8	5.2	1	2.5	2.7	8.7	12.5	26	NA	NA	559	0.24
Wendell's (11)	100.8	10	4.7	9	4.7	4.7	11.8	11.7	14	7	-8	156	1.69
Wendell's (11)	120.5**	13	7.6	33	6.3	5.4	8.3	15.9	13	25	46	140	1.91
Wendell's (11)	263.5	15	3.7	-2	1.4	1.7	6.0	7.8	16	19	1	151	0.69
Wendell's (11)	8555.0**	9	393.0	22	4.6	4.1	12.3	16.0	10	11	10	7603	4.00
Wendell's (11)	189.0	44	16.1	47	8.5	8.3	36.9	40.4	20	NA	NA	631	1.61
Wendell's (11)	1356.0	34	120.1	90	8.9	6.3	16.2	29.7	22	47	46	5421	1.36
Wendell's (11)	221.3**	18	13.9	60	6.3	4.6	5.0	5.5	21	NA	-33	86	0.30
Wendell's (11)	569.6	13	11.8	NA	2.1	0.1	10.7	11.8	14	24	9	928	1.83
Wendell's (11)	2278.2**	28	77.5	28	3.4	3.4	NA	NA	NA	NA	NA	NA	-97.45
Wendell's (11)	4051.0**	24	276.0	20	6.8	7.0	NA	17.8	11	23	10	5838	3.42
Wendell's (11)	1529.1	10	24.2	8	1.6	1.6	20.7	20.9	12	15	14	4429	3.28
Wendell's (11)	766.3**	8	57.3	23	7.5	6.6	13.5	15.5	12	14	13	1690	3.92
Wendell's (11)	106.8	35	6.1	55	5.8	5.0	12.9	19.4	13	26	2	149	1.16
Wendell's (11)	568.4	16	15.3	11	2.7	2.8	10.2	15.1	13	NA	NA	428	1.50
Wendell's (11)	449.4	20	13.8	-11	3.1	4.1	4.0	NA	NA	NA	NA	539	-0.35
Wendell's (11)	98.5	-2	-3.3	NA	NA	NA	NA	NA	NA	13	NA	12	-0.74
Wendell's (11)	765.1	27	47.5	43	6.2	5.5	14.2	19.3	23	23	25	2790	1.51
Wendell's (11)	104.3	-13	5.5	-22	5.3	5.9	20.6	24.3	6	4	-17	110	3.14
Wendell's (11)	497.5	31	5.7	58	1.1	0.9	11.3	8.3	23	99	NA	192	0.65
Wendell's (11)	4950.0	-2	435.0	55	8.8	5.5	12.1	24.3	9	0	14	6756	6.02
Wendell's (11)	385.7	8	18.9	-21	4.9	6.7	5.4	5.8	28	18	3	976	0.75
Wendell's (11)	1035.2**	23	25.6	21	2.5	2.5	15.3	20.6	19	50	39	2025	2.17
Wendell's (11)	445.6	12	6.5	431	1.5	0.3	7.9	8.4	12	16	5	184	0.81
Wendell's (11)	201.3	15	16.3	58	8.1	5.9	21.1	25.6	16	40	NA	398	0.97
Wendell's (11)	12160.5**	11	256.3	35	2.1	1.7	15.8	7.8	16	8	-4	17080	2.92
Wendell's (11)	565.4	7	-4.4	NA	NA	NA	14.0	22.3	6	6	4	775	2.57
Wendell's (11)	322.7**	12	21.0	12	6.5	6.5	9.6	14.2	12	5	15	314	3.02
Wendell's (11)	103.1	25	12.8	32	12.4	11.8	NA	29.8	20	NA	NA	441	2.44
Wendell's (11)	567.3	22	22.2	21	3.9	3.9	20.7	NA	14	NA	NA	1193	1.62
Wendell's (11)	1889.4	22	196.6	27	10.4	10.0	18.7	21.2	22	28	22	5675	2.04
Wendell's (11)	683.9	11	18.0	74	2.6	1.7	4.2	2.6	62	9	-15	795	0.29
Wendell's (11)	6530.7	31	323.2	31	4.9	4.9	23.7	31.0	25	35	35	20569	1.48
Wendell's (11)	132.3**	44	2.9	56	2.2	2.0	14.1	10.1	18	NA	NA	51	0.61
Wendell's (11)	2546.0**	15	144.0	10	5.7	5.9	15.8	15.6	12	12	23	3380	4.47
Wendell's (11)	1920.8	-69	55.1	-55	2.9	0.1	NA	10.3	26	20	17	1438	0.98

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH				MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTHS EARNING PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1989	1ST QUARTER 1988								
9 ELECTRICAL & ELECTRONICS														
INDUSTRY COMPOSITE	24891.0	9	1317.9	-4	5.3	6.0	11.4	12.4	15	10	8	63570	2.20	
(a) ELECTRICAL PRODUCTS GROUP COMPOSITE	5439.7	7	311.9	-3	5.7	6.3	14.7	18.0	11	5	15	16236	3.32	
Ametek	144.1	12	11.3	3	7.8	8.5	12.0	19.6	16	3	1	578	0.81	
Cooper Industries	1039.2**	12	38.0	18	3.7	3.5	10.2	13.0	13	8	25	2927	2.26	
Genlyte Group	129.3	3	2.9	-10	2.3	2.6	9.9	31.7	11	NA	NA	121	0.86	
Hubbell	161.8	7	19.2	13	11.8	11.2	17.4	18.7	13	12	13	914	2.69	
National Service Industries (4)	376.9	11	21.6	10	5.7	5.8	13.1	15.8	14	11	9	1225	1.83	
Raychem (6)	270.1	-2	2.4	-92	0.9	10.5	9.4	10.2	15	21	27	1145	2.19	
Square D	431.3	10	27.6	1	6.4	7.0	14.2	18.7	12	6	11	1371	4.54	
Westinghouse Electric	2887.2	5	189.0	5	6.5	6.6	17.4	21.9	10	1	18	7954	5.71	
(b) ELECTRONICS GROUP COMPOSITE	10091.5	11	576.6	2	5.7	6.3	12.5	13.0	12	18	-3	19539	2.91	
E-Systems	394.9	28	19.1	24	4.8	5.0	13.7	15.9	12	15	4	908	2.51	
General Instrument (10)	328.8	12	20.6	7	6.3	6.6	10.7	14.0	12	-4	-13	1014	2.55	
GM Hughes Electronics	2974.8	16	210.1	-10	7.1	9.1	10.3	10.1	14	6	17	3434	1.89	
Harris (6)	581.7	11	27.6	25	4.7	4.2	6.7	7.5	15	8	0	1123	1.94	
Litton Industries (5)	1204.7	4	43.5	7	3.6	3.5	10.0	14.4	12	-11	-3	1977	6.66	
Motorola	2175.0	11	123.0	8	5.7	5.8	14.6	13.5	13	11	7	5950	3.50	
Raytheon	2073.0	6	120.8	7	5.8	5.8	25.0	23.4	9	1	15	4555	7.50	
Varian Associates (3)	358.6	20	12.0	28	3.3	3.1	12.2	13.2	10	3	-15	579	2.66	
(c) INSTRUMENTS GROUP COMPOSITE	4633.4	8	157.6	23	3.4	3.0	-0.2	-3.4	NM	0	-8	9357	-0.39	
Foxboro	137.9	3	3.0	203	2.2	0.7	8.3	6.0	34	-10	9	406	0.96	
General Signal	478.4	15	19.8	0	4.1	4.7	3.1	5.5	44	-8	-18	1024	1.23	
Honeywell	1663.5	-4	62.9	9	3.8	3.3	NM	-24.8	NM	-5	NA	3159	-10.12	
Imo Industries	178.3	14	7.9	57	4.4	3.2	8.2	10.6	11	NA	NA	353	1.85	
Johnson Controls (3)	863.7	16	19.4	2	2.2	2.6	9.5	11.8	12	16	4	1306	2.87	
Mark IV Industries (10)	278.7	163	4.2	2	1.5	3.9	9.7	20.2	6	76	62	130	2.10	
Millipore	160.8	11	12.4	5	7.7	8.2	12.2	NA	16	14	19	886	1.98	
Perkin-Elmer (5)	316.8	6	17.2	20	5.4	4.8	10.0	9.1	18	7	2	1090	1.45	
Tektronix (7)	434.1	0	6.4	NM	1.5	NM	0.8	0.8	NM	-3	NA	638	0.13	
Teradyne	121.2	12	4.4	280	3.6	1.1	NM	NA	NM	21	NA	363	0.00	
(d) SEMICONDUCTORS GROUP COMPOSITE	4726.4	9	271.7	-24	5.8	8.2	14.8	14.8	14	13	27	18438	1.79	
Advanced Micro Devices	269.6	-5	10.1	-50	3.7	7.1	NM	-0.2	NM	17	NA	710	0.02	
AMP	712.6	9	77.3	0	10.8	11.9	19.6	21.0	15	14	13	4646	2.96	
Analog Devices (2)	114.1	13	9.5	49	8.3	6.3	10.8	11.7	13	17	2	543	0.87	
AVX	102.5	-3	6.3	11	6.2	5.4	10.0	13.6	8	17	9	230	2.11	
Intel	713.1	12	97.0	4	13.6	14.7	18.5	20.8	12	9	33	5236	2.49	
LSI Logic	133.9	83	8.0	71	6.0	6.5	4.5	8.2	17	14	4	455	0.65	
Micron Technology (4)	113.8	95	29.2	72	25.6	29.0	30.2	34.1	5	54	NA	649	3.93	
Molex (6)	141.7	11	14.8	6	10.4	10.9	NA	14.7	15	27	16	838	2.25	
National Semiconductor (7)	589.0	3	-80.9	NM	NM	2.3	NA	-13.5	NM	21	NA	832	-1.02	
Sprague Technologies	137.6	10	0.4	-89	0.3	3.0	3.0	3.0	22	NA	NA	216	0.54	
Texas Instruments	1561.1	6	84.6	-1	5.4	5.8	NA	19.3	10	7	2	3246	4.00	
Thomas & Betts	137.4	8	15.4	4	11.2	11.7	17.5	18.8	14	10	12	837	3.49	
10 FOOD														
INDUSTRY COMPOSITE	53066.8	16	1262.2	9	2.4	2.5	12.3	20.7	17	9	11	84070	2.05	
(a) FOOD DISTRIBUTION GROUP COMPOSITE	5393.5	25	71.7	20	1.3	1.4	11.3	16.6	16	15	10	4695	1.94	
Di Giorgio	259.8	7	1.7	-15	0.6	0.8	10.9	11.5	16	0	7	137	1.74	
Rykoff-Sexton (8)	317.2	14	4.5	18	1.4	1.4	9.4	11.3	14	23	8	286	1.68	
Super Food Services (4)	381.5**	7	3.4	12	0.9	0.8	11.6	15.7	13	15	17	197	2.11	
Super Rite Foods (10)	210.3	25	2.3	19	1.1	1.2	14.1	17.8	17	24	3	122	1.47	
Super Valu Stores (10)	2507.0	12	37.4	19	1.5	1.4	13.1	18.1	14	16	9	1880	1.81	
Sysco (6)	1717.7	64	22.5	27	1.3	1.7	9.7	17.1	20	17	12	2073	2.26	
(b) FOOD PROCESSING GROUP COMPOSITE	24037.6	12	913.0	16	3.8	3.7	14.1	19.7	16	7	13	60635	2.66	
American Maize-Products	137.1	20	2.1	464	1.6	0.3	4.6	2.1	39	7	-14	122	0.48	
Borden	1803.9	13	59.0	13	3.3	3.3	12.6	17.2	15	6	14	4703	4.31	
Campbell Soup (5)	1582.3	18	94.8	12	6.0	6.3	10.5	12.8	22	11	8	5661	2.00	
Castle & Cooke	563.1	2	12.5	-49	2.2	4.5	11.8	12.8	15	20	NA	1666	1.84	
ConAgra (7)	2682.2	22	37.6	23	1.4	1.4	15.9	20.0	15	23	19	2672	2.23	
CPC International	1260.0	16	67.7	17	5.4	5.4	18.1	25.0	15	-4	24	4446	3.81	
Curtice-Burns Foods (6)	204.1	12	3.2	4	1.6	1.7	7.3	17.7	11	11	7	183	2.86	
Dean Foods (7)	430.8	9	12.3	4	2.9	3.0	15.0	16.8	18	25	13	838	1.75	
Dekalb Genetics (4)	118.8	6	5.1	NM	4.3	0.1	9.5	13.9	12	NA	NA	155	2.38	
Flowers Industries (6)	175.2	7	5.8	-24	3.3	4.7	13.6	19.1	17	12	14	638	1.12	

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %			
General Mills (7)	1455.7	17	82.3	24	5.7	5.3	17.4	34.2	18	-14	5	5248	3.64	
Heinz (H. J.) (8)	1366.5	9	103.0	13	7.5	7.3	16.4	26.7	16	7	14	6566	3.22	
Hershey Foods	572.2	16	39.7	10	6.9	7.3	12.0	14.7	18	10	10	2604	1.63	
Holly Farms (7)	463.0	19	16.4	NM	3.5	0.3	14.0	19.0	13	14	7	1125	4.65	
Hormel (Geo. A.) (2)	551.2	-1	13.7	12	2.5	2.2	13.5	14.4	13	10	16	824	1.61	
Hudson Foods (3)	142.2	20	4.0	NM	2.8	NM	NM	25.3	8	84	-28	169	1.60	
IBP	2235.3	6	1.4	-90	0.1	0.7	7.9	10.1	14	4	NA	692	1.05	
International Multifoods (10)	479.8	6	7.0	-10	1.5	1.7	9.5	11.2	12	11	-9	367	2.49	
Lance	97.0	11	8.4	-8	8.7	10.5	17.4	19.3	16	7	7	628	1.21	
McCormick (1)	277.9	2	7.5	92	2.7	1.4	11.9	13.3	18	6	-5	676	1.70	
Pilgrim's Pride (3)	158.0	32	1.6	NM	1.0	NM	NM	10.6	23	NA	NA	164	0.32	
Pioneer Hi-Bred International (4)	136.6	32	12.2	NM	8.9	NM	14.2	14.9	14	11	2	1185	2.61	
Quaker Oats (6)	1381.5	3	68.1	-9	4.9	5.6	15.3	19.5	18	14	16	4476	3.17	
Ralston Purina (3)	1589.3	13	90.8	2	5.7	6.3	18.7	29.5	15	0	21	5663	5.59	
Sara Lee (6)	2835.9	14	95.0	23	3.4	3.1	13.1	NA	15	12	14	5756	3.39	
Smithfield Foods (8)	208.3	-11	5.1	-45	2.4	3.9	18.7	29.5	11	19	57	116	1.55	
Thorn Apple Valley (7)	134.2	3	0.1	-78	0.1	0.4	11.4	13.6	7	-1	-11	24	1.03	
Tyson Foods (3)	534.9	15	21.7	21	4.1	3.9	14.1	24.2	12	41	47	1030	1.36	
Universal Foods (3)	201.6	24	8.4	47	4.2	3.5	12.0	17.7	18	11	6	589	1.99	
Wrigley (Wm.) Jr.	259.0	20	26.4	30	10.2	9.4	29.7	30.2	18	6	21	1649	2.34	
FOOD RETAILING														
GROUP COMPOSITE	23635.7	18	277.5	-11	1.2	1.6	8.3	28.4	21	12	7	18741	1.06	
Albertson's (11)	1889.5	24	51.9	29	2.7	2.7	19.8	21.5	18	14	14	2904	2.44	
American Stores (11)	5388.9	41	20.2	-56	0.4	1.2	10.6	8.4	24	20	6	1843	2.54	
Big Bear (4)	270.0	15	0.7	-84	0.3	2.0	9.8	10.3	30	20	10	339	1.27	
Casey's General Stores (8)	101.0	25	1.7	-29	1.7	3.0	NA	14.3	13	63	31	132	0.88	
Circle K (8)	894.9**	45	12.8	45	1.4	1.4	7.3	15.3	15	38	17	668	1.05	
Dairy Mart Convenience Stores (11)	181.5***	43	-0.4	NM	NM	NM	8.5	12.9	14	69	24	58	0.94	
Delchamps (6)	224.0	9	3.8	93	1.7	1.0	10.6	15.4	15	9	-2	153	1.45	
Food Lion	1010.8	30	28.7	31	2.8	2.8	20.7	26.4	27	28	32	3300	0.38	
Foodarama Supermarkets (2)	131.1	6	0.0	-95	0.0	0.7	7.3	8.7	15	7	101	38	2.26	
General Nutrition (11)	116.3	2	5.0	NM	4.3	NM	NA	14.3	23	-1	-54	283	0.39	
Giant Food (10)	966.6	9	35.7	32	3.7	3.1	17.8	24.6	16	17	12	1564	1.63	
Great Atlantic & Pacific Tea (10)	2433.4	9	30.6	21	1.3	1.1	12.0	13.5	15	22	34	1964	3.34	
Hannaford Brothers	348.0**	26	8.6	22	2.5	2.5	12.3	18.3	17	22	20	509	1.61	
Kroger	4490.8	4	-19.0	NM	NM	0.9	NM	NM	NM	3	-24	880	-0.50	
Mayfair Super Markets (4)	152.7	6	0.7	-76	0.5	2.1	11.2	21.1	19	40	50	185	1.22	
National Convenience Stores (6)	239.3	6	-7.5	NM	NM	NM	NM	-12.8	NM	-2	-60	193	-0.42	
Penn Traffic (11)	434.7	169	-2.7	NM	NM	1.2	NM	-26.0	NM	-21	-23	103	-2.21	
Ruddick (3)	315.0	17	4.5	1	1.4	1.7	9.7	12.3	12	10	6	217	1.89	
Seaway Food Town (4)	127.5	NA	1.4	NA	1.1	NA	NA	NA	NA	-7	19	53	NA	
Stop & Shop (11)	1264.0	4	41.3	37	3.3	2.5	NM	-18.5	NA	-11	NA	NA	-0.70	
Village Super Market (5)	167.1	9	1.6	-14	1.0	1.2	8.8	11.9	10	29	71	58	1.80	
Weis Markets	301.5	7	20.3	7	6.7	6.7	16.2	16.5	16	12	11	1385	1.85	
Winn-Dixie Stores (6)	2186.9	6	37.4	31	1.7	1.4	18.3	18.3	14	5	1	1913	3.41	
FUEL														
INDUSTRY COMPOSITE	82966.5	5	5059.4	33	6.1	4.8	9.4	13.2	13	-2	-6	203846	3.17	
COAL														
GROUP COMPOSITE	725.2	5	30.6	-22	4.2	5.7	8.3	8.9	15	0	NA	1513	1.30	
Nerco	156.9	-10	16.3	-60	10.4	23.3	9.0	NA	12	12	9	593	1.53	
Pittston	418.6**	10	10.9	156	2.6	1.1	9.4	9.6	18	-4	NA	757	1.14	
Westmoreland Coal	149.7	9	3.5	NM	2.3	NM	NM	6.4	18	-8	NA	163	1.09	
OIL & GAS														
GROUP COMPOSITE	80241.8	5	4929.5	34	6.1	4.8	9.4	13.3	12	-2	-5	189013	3.42	
Amerada Hess	1484.8**	18	220.2	236	14.8	5.2	10.2	12.6	12	-4	-4	3279	3.41	
American Petrofina	718.9	19	48.8	60	6.8	5.0	11.3	18.2	7	6	15	1009	11.08	
Amoco	5908.0	16	458.0	-2	7.8	9.2	9.9	15.4	11	1	-3	23196	3.99	
Anadarko Petroleum	126.6	46	26.1	110	20.6	14.3	6.3	NA	28	0	NA	1485	1.02	
Ashland Oil (3)	1778.2**	2	-13.8	NM	NM	1.2	11.2	17.2	11	3	21	2474	3.70	
Burlington Resources	442.2	-29	56.8	24	12.8	7.4	3.1	2.3	NA	NA	NA	6845	NA	
Chevron	7700.0***	3	313.0	-52	4.1	8.7	7.1	9.7	14	1	-4	19457	4.17	
Crown Central Petrol	284.3	10	2.8	589	1.0	0.2	14.1	15.9	7	2	NA	229	5.02	
Diamond Shamrock R&M	466.5	11	14.9	NM	3.2	NM	14.5	19.6	9	NA	NA	596	2.90	
Exxon	20409.0**	0	1270.0	-13	6.2	7.1	11.6	16.0	12	3	5	56861	3.88	
Kerr-McGee	717.1	8	33.9	225	4.7	1.6	7.3	8.8	17	-5	1	2157	2.60	
Louisiana Land & Exploration	196.1**	-3	20.6	NM	10.5	0.5	NM	-10.3	NM	-4	NA	1079	-1.63	
Mapco	468.4*	7	35.4	3	7.6	7.9	12.5	19.3	12	-4	26	1391	5.93	
Maxus Energy	152.3	-6	-9.9	NM	NM	NM	NM	NM	NM	-60	NA	651	-1.21	
Mitchell Energy & Dev. (11)	152.7	-2	5.1	12	3.3	2.9	2.3	0.2	NM	4	-39	690	0.02	
Mobil	14024.0***	1	429.0	-22	3.1	3.9	9.5	12.2	11	4	5	21409	4.64	
Murphy Oil	386.6**	9	6.4	NM	1.7	NM	3.8	6.8	24	-7	-21	1240	1.52	
Occidental Petroleum	5143.0	15	76.0	-32	1.5	2.5	8.2	4.4	26	21	-13	7436	1.07	
Pennzoil	672.9**	39	52.5	NM	7.8	0.9	NM	-12.0	NM	-9	NA	3089	-3.63	

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN		5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4/21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL	ON COMMON EQUITY	P-E 4-21	COMMON EQUITY	EARNINGS PER SHARE		
Phillips Petroleum	3052.0	7	190.0	46	6.2	4.5	13.0	33.3	8	-24	-21	5838	2.94
Quaker State	192.4	-13	0.4	-88	0.2	1.4	4.3	NA	37	3	-13	445	0.46
Sun	2650.0***	11	81.0	35	3.1	2.5	NM	0.8	NM	-6	-47	4310	0.25
Sun Exploration & Production	304.0**	-8	17.0	NM	5.6	NM	NM	-17.6	NM	NA	NA	3370	-2.68
Texaco	9610.0**	10	1455.0	439	15.1	3.1	19.1	32.6	5	-12	13	13437	10.15
Tosco	274.7	4	-8.0	NM	NM	3.0	11.8	37.4	16	NA	NA	204	0.30
Union Texas Petroleum	306.8**	-16	49.8	31	16.2	10.5	12.0	46.9	15	NA	NA	1089	0.87
Unocal	2419.0**	14	87.0	NM	3.6	NM	8.8	18.0	14	-20	-40	5282	3.35
Valero Energy	201.4	-5	11.4	44	5.7	3.7	6.9	3.5	27	2	-18	465	0.67
(c) PETROLEUM SERVICES GROUP COMPOSITE	1999.6	-1	99.3	8	5.0	4.6	11.3	10.6	29	-13	NA	13320	1.05
Baker Hughes (3)	568.6	6	15.8	230	2.8	0.9	6.8	6.4	34	-3	NA	2104	0.52
Cameron Iron Works (6)	151.0	12	5.1	NM	3.4	NM	5.0	1.2	NM	-7	NA	690	0.14
Ocean Drilling & Exploration	98.3**	2	-3.9	NM	NM	NM	-3.1	NM	NA	-14	NA	927	-0.44
Schlumberger	1181.8	-5	82.3	-19	7.0	8.1	18.1	15.8	24	-16	-15	9598	1.70
12 HEALTH CARE	30822.6	10	3106.2	14	10.1	9.7	18.5	23.4	17	8	12	178846	2.94
(a) DRUG DISTRIBUTION GROUP COMPOSITE	7446.5	11	159.6	23	2.1	1.9	9.6	12.8	15	11	8	7088	1.43
Anac Holding (7)	664.6	11	-6.0	NM	NM	NM	NM	NA	NA	NA	NA	NA	-24.92
Bergen Brunswig (4)	970.4**	12	11.4	35	1.2	1.0	12.1	17.6	13	12	3	519	2.19
Bindley Western Industries	362.2	17	0.9	-24	0.2	0.4	10.3	7.3	15	8	-7	50	0.54
Drug Emporium (10)	112.7	17	3.1	73	2.7	1.8	16.1	NA	18	NA	NA	150	1.32
Durr-Fillauer Medical	171.9	23	2.8	41	1.6	1.4	13.7	18.9	12	9	15	143	1.62
Fay's Drug (11)	149.9	6	4.8	28	3.2	2.6	13.3	18.6	15	12	-10	147	0.73
Genovese Drug Stores (11)	107.7	26	2.6	35	2.4	2.2	11.1	17.1	13	12	0	74	0.83
Longs Drug Stores (11)	549.5	11	16.9	13	3.1	3.0	17.0	18.1	13	6	9	740	2.75
McKesson (9)	1877.4**	9	25.4	4	1.4	1.4	NA	13.5	15	9	5	1328	2.22
Perry Drug Stores (2)	184.3	5	4.2	132	2.3	1.0	NM	-12.7	NM	-2	NA	121	-0.58
Rite Aid (10)	819.2	18	36.1	0	4.4	5.2	13.1	15.6	16	16	9	1508	2.30
Walgreen (4)	1476.7	9	57.3	21	3.9	3.5	15.3	19.9	16	15	11	2307	2.35
(b) DRUGS & RESEARCH GROUP COMPOSITE	11079.0	10	1844.5	13	16.6	16.2	24.5	27.7	18	5	14	110041	3.56
American Home Products	1519.8	8	263.8	11	17.4	16.8	32.0	32.2	14	7	10	13224	6.56
Lilly (Eli)	1225.0	14	284.7	22	23.2	21.8	21.9	25.2	19	10	7	14501	5.69
Marion Laboratories (6)	243.3	26	55.1	40	22.6	20.4	41.4	42.6	21	30	58	3991	1.27
Merck	1571.4	9	340.4	25	21.7	18.9	35.1	44.7	21	1	25	27276	3.22
Pfizer	1436.3	11	240.8	10	16.8	16.9	18.1	18.9	13	15	11	10213	4.82
Rorer Group	241.2	10	9.8	17	4.1	3.8	9.1	14.1	21	17	0	1340	2.00
Schering-Plough	831.8	11	125.7	24	15.1	13.5	25.3	24.7	18	5	16	7606	3.69
SmithKline Beckman	1241.8	7	130.2	-22	10.5	14.3	12.7	12.5	40	-8	-3	7796	1.55
Squibb	662.7	11	106.5	17	16.1	15.2	30.3	31.5	17	3	21	7368	4.50
Syntex (5)	330.9	7	83.5	4	25.2	25.9	43.9	48.5	17	3	21	5267	2.73
Upjohn	755.1**	14	103.0	8	13.6	14.4	17.2	19.8	15	12	18	5511	1.95
Warner-Lambert	1019.7	10	101.1	21	9.9	9.0	27.7	35.8	17	-9	15	5949	5.27
(c) HEALTH CARE SERVICES GROUP COMPOSITE	3802.8	10	156.2	3	4.1	4.4	8.4	13.6	17	16	0	9402	1.34
American Medical International (4)	678.2	-11	18.1	-25	2.7	3.2	8.2	9.6	24	10	-10	1487	0.90
Beverly Enterprises	511.1	3	-9.4	NM	NM	NM	NM	-7.2	NM	4	NA	473	-0.62
Community Psychiatric Centers (1)	98.0	24	20.5	22	20.9	21.4	17.2	19.5	18	20	19	1375	1.62
FHP International (6)	186.8	38	5.3	28	2.9	3.1	28.9	45.0	12	NA	NA	242	1.99
Humana (4)	1005.5	19	62.4	14	6.2	6.5	12.7	20.4	13	13	1	3017	2.41
National Medical Enterprises (7)	939.1**	15	49.4	14	5.3	5.3	9.3	17.4	12	8	6	2205	2.44
U. S. Healthcare	230.6**	33	5.2	-4	2.3	3.1	2.4	2.4	NM	30	-14	468	0.07
Universal Health Services	153.5	5	4.5	16	2.9	2.7	4.7	4.5	20	9	-20	136	0.47
(d) MEDICAL PRODUCTS GROUP COMPOSITE	8494.4	7	945.9	16	11.1	10.2	17.1	21.5	16	11	13	52316	2.91
Abbott Laboratories	1295.5	9	198.0	15	15.3	14.5	26.1	31.6	16	11	18	12338	3.45
Bard (C. R.)	197.2	10	21.3	17	10.8	10.1	23.5	24.9	15	11	21	1247	1.45
Baxter International	1774.0	9	101.0	11	5.7	5.6	9.2	10.8	14	25	12	4665	1.34
Becton, Dickinson (3)	462.9	8	41.6	15	9.0	8.4	13.9	15.9	14	11	33	2112	3.90
Bristol-Myers	1602.2	5	237.1	13	14.8	13.9	22.8	24.1	16	14	13	13884	2.97
Cooper (2)	130.7	-18	-4.1	NM	NM	NM	NM	NM	NM	-10	NA	105	-6.19
Johnson & Johnson	2445.0	6	317.0	14	13.0	12.1	23.2	28.9	16	3	16	15987	6.00
Medtronic (8)	186.8	12	23.8	10	12.8	12.9	21.2	21.0	13	6	14	1221	7.13
Mine Safety Appliances	102.7	10	6.1	42	5.9	4.6	9.6	11.2	13	12	5	329	3.94
Owens & Minor	195.8	10	0.9	-54	0.5	1.1	7.3	9.5	14	23	11	100	0.88
Westmark International	101.4	11	3.3	62	3.2	2.2	5.0	5.0	29	NA	NA	328	1.16

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL	ON COMMON EQUITY	P/E 4-21	COMMON EQUITY	EARNINGS PER SHARE			
HOUSING & REAL ESTATE														
INDUSTRY COMPOSITE	8005.0	17	325.4	0	4.1	4.7	11.3	27.0	10	3	11	16426	2.19	
BUILDING MATERIALS														
GROUP COMPOSITE	6273.2	9	272.0	-4	4.3	4.9	13.4	29.3	10	4	12	15120	2.48	
Barnes Group	128.7	3	3.5	-10	2.7	3.1	10.7	14.4	12	-3	13	194	2.97	
CalMat	152.9**	-1	13.2	-8	8.6	9.2	8.8	11.5	16	29	41	899	1.78	
Le Soto	99.0	1	1.4	-21	1.4	1.8	4.8	2.9	71	-6	-23	201	0.70	
Wadders	107.0	88	6.8	71	6.4	7.0	NA	20.5	15	NA	40	212	1.06	
Armco	97.7	-9	-1.5	NM	NM	2.6	16.9	24.1	8	NA	NA	244	2.29	
L Hughes Supply (11)	125.6	10	2.6	1	2.1	2.2	7.9	10.8	9	15	12	90	1.99	
Epson	168.6	10	5.8	139	3.4	1.6	13.1	21.9	12	NA	NA	195	0.87	
Wafarage	207.4	12	-19.6	NM	NM	NM	10.5	13.4	8	13	93	780	1.97	
Avanville	508.3	9	34.4	0	6.8	7.4	7.2	30.2	5	-12	-1	291	1.61	
Poland	104.9	5	0.5	-48	0.5	1.1	5.7	5.1	18	6	13	87	1.30	
Wwens-Corning Fiberglas	665.0	5	34.0	21	5.1	4.4	41.7	-33.3	6	NA	4	1105	4.87	
PG Industries	1459.4	6	129.8	9	8.9	8.6	15.5	21.3	10	3	19	4862	4.34	
Coffy's (6)	149.1	9	3.4	11	2.3	2.2	4.3	2.7	48	9	-10	218	0.31	
Herwin-Williams	464.8	12	8.8	5	1.9	2.0	13.4	16.9	12	10	15	1211	2.31	
Outdown	144.7**	92	7.0	41	4.8	6.6	8.3	NA	10	3	9	374	2.28	
Landex International (6)	109.1	1	4.6	NM	4.2	NM	11.9	15.1	12	3	-2	254	1.95	
Scumseh Products	402.9	39	21.7	10	5.4	6.8	11.1	11.7	11	9	3	804	13.20	
Exas Industries (7)	157.0	10	-1.6	NM	NM	0.4	7.5	3.9	35	3	-55	308	0.99	
Glyer	163.6	7	-2.0	NM	NM	1.9	7.9	18.9	18	-17	-7	204	0.52	
SG	538.0	-4	1.0	-97	0.2	6.1	15.8	-2.7	8	-4	6	324	0.75	
Alspar (2)	102.0	8	2.6	45	2.5	1.9	15.2	19.1	16	11	15	314	1.70	
Ulcen Materials	217.5	7	15.7	1	7.2	7.7	17.6	21.5	15	6	21	1951	3.30	
CONSTRUCTION & REAL ESTATE														
GROUP COMPOSITE	1731.9	56	53.4	32	3.1	3.6	6.2	11.5	11	2	-9	1307	0.86	
Mount (10)	245.1**	-1	1.4	NM	0.6	NM	NA	-51.1	NM	9	-23	150	-6.03	
Overman Enterprises (10)	170.8**	43	12.7	13	7.4	9.4	NA	24.4	7	52	61	195	1.26	
Aufman & Broad Home (1)	174.1**	28	11.5	64	6.6	5.2	16.7	22.7	6	NA	NA	311	1.92	
Laxxam ↑	572.2	NM	7.0	483	1.2	2.4	NM	NA	8	-8	-57	207	3.30	
Sters (J. M.) (10)	121.4**	-16	15.6	4	12.9	10.4	13.6	44.5	3	NA	NA	121	2.81	
Yland Group	294.5	11	4.6	-17	1.6	2.1	6.7	23.6	6	24	27	243	3.02	
S. Home	153.8	3	0.4	-41	0.3	0.5	NM	NA	14	-12	NA	80	0.14	
LEISURE TIME INDUSTRIES														
INDUSTRY COMPOSITE	13040.2	11	613.2	11	4.7	4.7	10.6	17.4	18	12	20	47025	1.85	
EATING PLACES														
GROUP COMPOSITE	3316.2	9	188.0	9	5.7	5.7	10.9	19.4	16	12	10	14154	2.29	
Job Evans Farms (8)	105.7	0	8.1	-8	7.6	8.3	NA	15.6	14	15	13	445	1.07	
Collins Foods International (8)	160.2	-7	6.8	39	4.3	2.9	11.9	12.9	14	22	7	408	1.28	
Tricco (6)	163.2**	6	5.3	31	3.2	2.6	6.8	8.4	16	6	1	320	1.01	
Archer (Carl) Enterprises (11)	111.0	25	4.2	77	3.8	2.7	22.5	36.2	14	11	-3	243	1.93	
McDonald's	1362.5	12	141.7	13	10.4	10.3	11.6	19.4	15	14	15	10208	3.53	
Larrison (7)	207.0**	17	8.8	25	4.3	4.0	15.0	17.5	17	8	7	512	1.72	
Woney's (2)	237.1**	12	3.0	-77	1.3	6.2	20.1	-9.3	9	25	13	318	0.94	
W Services	864.2	7	8.2	17	1.0	0.9	6.7	11.0	29	0	-7	1576	1.12	
W Corp Restaurants (2)	105.3	12	1.8	NM	1.8	NM	NM	-7.5	NM	17	NA	194	-0.76	
ENTERTAINMENT														
GROUP COMPOSITE	2432.9	25	113.6	25	4.7	4.7	9.7	12.4	26	2	39	10900	1.75	
CA	735.3**	20	27.3	2	3.7	4.4	7.4	9.8	24	8	4	4026	2.26	
GM/UA Communications (4)	241.9	53	-14.7	NM	NM	NM	NM	-55.3	NM	-15	NA	906	-1.99	
Warner Communications	1455.7	24	101.0	47	6.9	5.9	19.0	21.8	18	NA	119	5968	2.66	
HOTEL & MOTEL														
GROUP COMPOSITE	2765.6	8	115.5	15	4.2	3.9	12.9	52.6	15	8	13	9503	2.59	
Cesars World (5)	213.8	8	10.4	-34	4.9	8.0	15.3	31.3	13	11	37	856	2.64	
Circus Circus Enterprises (11)	115.7	4	11.6	-4	10.0	10.9	18.9	44.4	16	31	20	1134	2.29	
Wton Hotels	225.1	5	13.1	-53	5.8	12.9	9.7	14.3	25	6	6	2868	2.42	
oliday	424.9**	5	34.5	NM	8.1	0.0	21.4	-22.3	6	NA	7	990	6.03	
arriott	1786.0	9	46.0	3	2.6	2.7	9.9	32.8	17	4	18	3655	2.00	
OTHER LEISURE														
GROUP COMPOSITE	4525.6	7	196.1	4	4.3	4.5	9.2	12.0	17	15	8	12468	1.30	
American Greetings (10)	318.7**	1	14.3	NM	4.5	0.2	7.1	7.9	18	12	-5	755	1.38	
illy Mfg.	516.7**	11	11.8	15	2.3	2.2	6.3	5.4	19	7	37	586	1.18	
unswick	791.1	-9	17.2	-68	2.2	6.2	12.1	16.5	11	21	23	1710	1.80	
arnival Cruise Lines (1)	231.8	52	46.3	1	20.0	30.1	NM	26.1	12	NA	NA	2322	1.46	
PI (11)	101.8	18	12.4	33	12.2	10.8	NA	24.2	14	39	20	413	1.81	
etwood Enterprises (8)	346.8	11	12.6	58	3.6	2.6	18.3	17.5	9	15	2	604	2.94	
arley-Davidson	197.0	14	7.8	26	4.0	3.6	15.7	23.7	8	191	80	253	3.48	
Arman International (6)	133.5	8	3.8	27	2.9	2.4	14.7	NA	13	NA	NA	181	1.68	

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN		5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE		
Hasbro	288.3	1	18.7	12	6.5	5.9	11.0	10.6	15	49	10	988	1.27
Huffy	115.8	14	4.3	30	3.7	3.3	7.1	6.8	26	6	27	141	0.66
Mattel	195.3	4	4.3	NM	2.2	0.1	16.2	30.6	15	-5	1	598	0.83
Outboard Marine (3)	473.9	18	11.9	-41	2.5	5.0	10.7	10.8	10	11	3	633	3.26
Polaroid	442.3	8	25.9	82	5.9	3.5	-0.8	-1.1	NM	3	NA	2722	-0.18
Tonka	162.2	-4	-6.1	NM	NM	NM	-0.2	-1.6	NM	31	NA	113	-0.18
Trans World Music (11)	103.4	42	8.2	30	8.0	8.8	22.1	31.5	18	NA	NA	239	1.50
Winnebago Industries (4)	107.1	12	2.6	103	2.4	1.3	5.8	6.5	22	9	-24	210	0.39
15 MANUFACTURING													
INDUSTRY COMPOSITE	18470.2	13	892.6	28	4.8	4.3	12.5	14.9	13	5	36	48000	2.51
(a) GENERAL MANUFACTURING GROUP COMPOSITE	4866.2	17	274.9	36	5.6	5.1	12.9	16.7	14	8	16	15075	2.07
Avery International (1)	413.9	11	20.3	17	4.9	4.7	12.2	15.8	13	17	6	1052	1.83
Corning Glass Works †	533.5	18	41.1	12	7.7	8.1	15.0	19.0	10	10	25	2999	3.31
Crane	348.1	27	10.7	15	3.1	3.4	13.4	18.4	12	3	17	577	2.27
Eagle Industries (5)	194.8	NA	1.5	NA	0.8	NA	NA	NA	NA	NA	NA	NA	NA
Harsco	370.0	26	15.5	-4	4.2	5.5	6.9	7.2	23	1	5	710	1.16
Hexcel	101.3	1	1.5	-53	1.5	3.3	7.5	11.4	15	24	25	208	2.07
Hillenbrand Industries (1)	262.5	19	16.8	-11	6.4	8.5	14.8	18.6	17	10	17	1161	1.81
Illinois Tool Works	493.8	9	37.0	18	7.5	6.9	15.5	19.0	13	17	24	1874	2.76
Jostens (6)	148.2	18	11.7	31	7.9	7.2	19.9	25.8	16	-1	10	775	1.37
Marley (8)	156.2	18	26.0	NM	16.6	0.3	NM	NM	NA	NA	NA	NA	-2.61
Newell	271.9	15	14.0	42	5.2	4.2	13.7	22.2	15	27	22	820	2.31
Norton	388.2	10	28.9	9	7.4	7.4	12.8	15.1	11	-3	8	1003	4.16
Oneida (11)	99.4**	21	2.5	-62	2.5	8.0	13.2	16.6	12	-3	7	205	1.62
Philips Industries (9)	245.6	42	8.5	8	3.5	4.6	15.2	19.0	12	25	24	544	1.61
Robertson (H. H.)	109.2	19	-4.4	NM	NM	NM	NM	-8.7	NM	-14	NA	65	-1.13
Rubbermaid	349.0	16	29.3	14	8.4	8.5	18.5	20.1	22	21	19	2262	1.40
Sealed Air	95.7	14	7.2	15	7.5	7.5	15.7	16.2	14	21	18	376	3.21
Valmont Industries	189.4	23	4.2	36	2.2	2.0	15.4	20.7	10	9	5	160	2.91
Wyman-Gordon	95.6	27	2.5	-29	2.6	4.7	1.9	1.9	57	-6	-29	285	0.28
(b) MACHINE & HAND TOOLS GROUP COMPOSITE	2291.3	9	120.0	21	5.2	4.7	12.3	14.2	14	4	20	6380	2.07
Black & Decker (3)	570.7	6	25.9	22	4.5	3.9	14.7	14.4	10	4	5	1086	1.85
Cincinnati Milacron	189.1	1	5.5	14	2.9	2.6	9.1	11.5	22	-7	NA	563	1.05
Clark Equipment	313.7	11	14.0	61	4.5	3.1	10.9	12.5	12	-5	NA	640	3.01
Cross & Trecker (3)	121.4	25	-5.5	NM	NM	NM	NM	-17.1	NM	-4	NA	172	-2.23
Kennametal (6)	124.6	12	9.6	44	7.7	5.9	12.7	14.6	12	-4	21	332	2.74
Nacco Industries	151.2	37	7.9	14	5.2	6.3	14.1	18.7	8	18	17	346	5.19
Snap-on Tools	232.1**	8	31.4	5	13.5	13.8	22.2	22.8	13	15	18	1529	2.78
Stanley Works	480.6	3	24.6	15	5.1	4.6	11.5	15.3	13	10	12	1412	2.48
Vermont American	107.9	13	6.7	1	6.2	7.0	10.2	12.7	18	6	8	300	1.53
(c) SPECIAL MACHINERY GROUP COMPOSITE	9284.5	13	434.3	26	4.7	4.2	12.9	14.4	12	3	52	23295	3.26
Allied Products	159.6	8	4.8	233	3.0	1.0	9.0	5.9	15	29	-20	100	1.32
Applied Materials (2)	106.7	67	13.5	137	12.6	8.9	22.7	22.2	9	26	-6	421	2.88
Briggs & Stratton (6)	307.4	6	14.5	-20	4.7	6.2	3.6	3.8	34	3	-3	369	0.74
Caterpillar	2626.0	12	141.0	20	5.4	5.0	14.0	15.5	10	5	60	6136	6.31
Commercial Intertech (2)	101.2	27	3.1	95	3.1	2.0	9.4	11.5	15	7	23	255	1.57
Deere (2)	1141.5	9	48.4	25	4.2	3.7	13.0	11.9	13	-1	52	3998	4.14
Dover	514.8	10	32.1	-14	6.2	8.0	19.3	19.0	14	7	12	1940	2.16
Dresser Industries (2)	847.8	6	22.0	142	2.6	1.1	9.3	8.9	19	-5	26	2567	1.98
FMC	837.1	17	30.0	24	3.6	3.4	19.6	-60.4	10	NA	37	1237	3.76
Goulds Pumps	114.0	13	6.5	32	5.7	4.9	12.9	12.8	18	7	-1	456	1.23
Harnischfeger Industries (2)	320.8	22	9.1	194	2.8	1.2	10.3	8.2	15	34	31	623	1.31
Ingersoll-Rand	801.8	13	40.7	21	5.1	4.7	11.0	13.0	12	4	26	1969	3.14
Interlake	234.1	10	8.2	0	3.5	3.9	12.6	14.6	11	-5	13	411	3.80
Stewart & Stevenson Services (11)	139.8	5	7.1	-4	5.1	5.6	17.9	21.6	10	-3	NA	217	3.02
Terex	103.1	51	3.6	42	3.5	3.7	15.5	20.8	8	126	77	119	1.90
Timken	434.7	14	27.7	88	6.4	3.9	7.5	8.1	13	5	71	1015	2.80
Tyco Laboratories (7)	494.1	23	22.0	28	4.5	4.3	10.7	19.5	15	12	23	1463	2.31
(d) TEXTILES GROUP COMPOSITE	2028.3	12	63.4	31	3.1	2.7	9.0	13.1	13	10	7	3251	1.75
Albany International	118.2	8	9.4	50	7.9	5.7	12.6	22.1	11	NA	NA	443	1.57
Delta Woodside Industries (6)	147.3	20	8.6	22	5.9	5.8	31.3	NA	10	NA	NA	278	1.58
DWG (8)	306.8	4	-0.1	NM	NM	1.4	-0.7	-1.6	NM	8	-31	200	0.03
Fieldcrest Cannon	296.3	-5	3.0	NM	1.0	NM	6.0	6.3	16	11	0	271	1.62
Guilford Mills (6)	155.7	12	6.1	3	3.9	4.3	10.3	13.0	12	12	5	294	2.61
Interface	147.4	89	5.6	19	3.8	6.1	NA	16.8	13	44	18	280	1.23
Shaw Industries (6)	283.1	14	9.6	46	3.4	2.7	14.8	25.4	10	16	19	414	2.83
Springs Industries	471.9	11	15.3	46	3.2	2.5	8.9	10.7	13	5	12	746	3.25
Unifi (6)	101.7	35	5.8	1	5.7	7.6	18.8	19.8	14	12	22	325	2.34

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Room for the whole crew.

It seems most mid-size cars these days barely have enough room to accommodate your elbows, let alone a whole crew.

But we've changed all that with the launching of a space vehicle. The new Sonata from Hyundai. Inside the Sonata you'll discover deep space. An astronomical 100 cubic feet of it. Which adds up to more passenger room than any other car in its class.

And it's comforting to know that the Sonata GLS comes equipped with the

right stuff. Like

cut-pile carpeting and reclining bucket seats. A fold-down 60/40 split rear seat with a disappearing armrest. There's even a whole galaxy of standard features like power windows and power door locks. And an electronically tuned AM/FM stereo cassette with 6 speakers. We've also included an optional sunroof for views that are out of this world.

When you're ready to take off there's a fuel-injected, 2.4-liter overhead-cam engine waiting under the hood. It's the most powerful standard engine in its class.

And coupled with front-wheel drive, the Sonata can really fly.

Hyundai has a reputation for going the distance, so every Sonata is backed by our 36 month/36,000 mile Bumper-to-Bumper limited warranty (with no deductible required).^{*} Each new Sonata owner also receives free membership in the Cross Country Motor Club.[®] And, because it's a Hyundai, you can be sure it's priced down to earth.

For the location of your nearest Hyundai dealer call 1-800-826-CARS. And test drive the new Sonata. It's a move that'll sit well with the crew.



The Sonata from
HYUNDAI
Cars that make sense.

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL.	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %		
					1ST QUARTER 1989 %	1ST QUARTER 1988 %							
16 METALS & MINING													
INDUSTRY COMPOSITE	12865.0	20	1111.7	47	8.6	7.0	16.6	24.7	5	7	NA	23973	6.32
(a) ALUMINUM													
GROUP COMPOSITE	5049.2	21	514.7	55	10.2	7.9	18.1	27.2	5	6	51	10724	9.98
Aluminum Co. of America	2624.4	25	276.0	54	10.5	8.5	15.3	20.9	6	7	23	5617	10.84
Amax	979.6	7	114.2	39	11.7	9.0	NM	45.2	3	0	NA	2109	9.05
Reynolds Metals	1445.2	24	124.5	78	8.6	6.0	17.7	26.3	6	10	29	2998	9.97
(b) STEEL													
GROUP COMPOSITE	5957.0	14	276.0	8	4.6	4.9	13.6	21.4	7	4	NA	8895	3.56
Allegheny Ludlum	363.9	33	34.4	69	9.4	7.4	35.6	54.4	7	NA	NA	897	5.43
Armco	899.8	20	40.9	NM	4.5	0.0	16.5	19.5	6	-10	NA	1009	1.86
Bethlehem Steel	1402.5	6	64.7	-24	4.6	6.4	NM	23.6	5	4	NA	1744	4.73
Birmingham Steel (6)	106.1	24	9.4	61	8.9	6.8	26.3	30.7	8	NA	NA	309	3.33
Carpenter Technology (6)	169.6	15	0.6	-92	0.3	5.0	6.6	8.4	16	1	-14	432	2.88
Commercial Metals (4)	315.9	7	6.9	-3	2.2	2.4	14.5	16.5	9	8	19	248	2.51
Cyclops Industries	306.8	27	9.3	47	3.0	2.6	24.3	91.2	6	NA	NA	186	4.54
Inland Steel Industries	1101.4	14	49.4	-2	4.5	5.2	12.2	15.2	6	8	NA	1383	6.98
Lone Star Technologies	166.7	3	-17.1	NM	NM	0.7	NM	-19.7	NM	-8	NA	210	-2.92
Lukens	159.6	15	7.1	6	4.5	4.8	15.0	18.6	7	8	61	230	3.96
Nucor	309.9	26	16.0	-7	5.2	7.0	10.3	13.1	15	15	15	1075	3.28
Quanex (2)	115.5	13	7.2	408	6.2	1.4	19.3	23.3	8	4	38	210	2.25
Wheeling-Pittsburgh Steel	287.5	9	31.5	0	10.9	11.9	NM	NM	0	NA	NA	79	33.08
Worthington Industries (7)	251.6	11	15.9	10	6.3	6.4	16.9	20.7	14	17	18	883	1.55
(c) OTHER METALS													
GROUP COMPOSITE	1858.8	37	321.0	92	17.3	12.4	18.6	24.6	5	26	NA	4355	7.78
Asarco	618.2	38	68.6	54	11.1	10.0	14.8	17.4	5	9	NA	1224	5.50
Cyprus Minerals	435.8	69	81.0	205	18.6	10.3	17.3	21.3	5	7	NA	1075	8.22
Intermet	112.4	36	5.6	40	5.0	4.8	10.5	NA	15	44	5	230	0.83
Phelps Dodge	692.5	22	165.9	79	24.0	16.3	22.7	33.5	4	10	300	1826	15.16
17 NONBANK FINANCIAL													
INDUSTRY COMPOSITE	33963.8	18	1484.0	-8	4.4	5.6	16.9	13.8	11	14	20	64135	2.90
(a) FINANCIAL SERVICES													
GROUP COMPOSITE	22243.0	23	897.6	-9	4.0	5.4	20.6	16.8	12	11	20	45674	2.97
Alleghany	236.3	6	7.0	53	3.0	2.1	9.1	8.9	11	4	23	545	7.65
American Express	5867.0**	21	251.9	4	4.3	5.0	34.7	20.2	15	2	9	13910	2.29
Bear Stearns (6)	623.6**	26	41.1	-22	6.6	10.6	NA	NA	NA	NA	NA	1241	NA
Block (H&R) (8)	135.3	13	-9.6	NM	NM	NM	NA	26.2	15	13	15	1410	1.77
Corroon & Black	119.7**	13	12.1	-86	10.1	82.1	15.8	18.8	13	16	39	588	2.56
Edwards (A. G.) (10)	134.0**	24	11.4	104	8.5	5.1	12.8	12.0	12	13	6	434	1.70
Equifax	195.5	15	8.5	32	4.3	3.8	13.0	16.0	19	20	13	700	1.51
Federal National Mortgage Assn.	2754.2**	8	165.2	64	6.0	4.0	10.9	25.3	10	13	53	5387	7.10
Marsh & McLennan	622.7**	5	88.3	-6	14.2	15.8	29.3	38.5	15	16	36	4407	4.04
Merrill Lynch	3003.1**	25	37.2	-46	1.2	2.8	42.0	11.8	7	14	21	2911	4.05
Morgan Stanley Group	1238.8**	27	81.1	-18	6.6	10.1	71.5	26.9	6	60	NA	2098	9.68
PaineWebber Group	677.6**	11	9.2	-56	1.4	3.4	45.6	0.8	93	21	-15	493	0.19
Primerica	1015.8**	343	51.4	75	5.1	12.8	9.8	9.4	6	11	NA	2016	3.48
Schwab (Charles)	122.4**	27	4.0	96	3.3	2.1	30.8	6.0	29	NA	NA	257	0.35
Shearson Lehman Hutton Holding	3003.0**	21	-15.0	NM	NM	3.0	59.0	-1.5	NM	NA	NA	1666	-0.20
Student Loan Marketing Assn.	782.1	66	61.3	14	7.8	11.4	NA	38.1	17	16	31	3468	5.57
Telerate	122.7	17	21.7	-8	17.7	22.6	NA	26.2	16	66	35	1482	0.95
Transamerica	1589.3**	4	70.9	131	4.5	2.0	10.1	12.5	8	8	12	2661	4.34
(b) INSURANCE													
GROUP COMPOSITE	5423.7	5	398.2	3	7.3	7.5	11.0	13.6	9	16	16	11472	3.38
American National Insurance	250.4	11	26.2	24	10.5	9.4	NA	6.5	10	14	1	1018	3.52
Chubb	992.0	7	104.9	2	10.6	11.0	14.7	16.7	8	26	51	2799	8.93
Fireman's Fund	830.7	-16	36.5	-52	4.4	7.7	NM	13.2	8	2	NA	1526	4.03
First Capital Holdings	203.0	39	16.4	235	8.1	3.3	12.3	14.2	5	171	131	349	2.32
Hartford Steam Boiler	118.1	7	19.8	20	16.7	15.0	21.5	27.8	12	12	56	853	3.63
Provident Life & Accident	682.9**	4	26.1	NM	3.8	0.2	NA	10.5	10	12	-20	NA	2.35
Reliance Group Holdings	854.9	21	27.1	94	3.2	2.0	NM	NA	10	12	NA	354	0.50
Safeco	705.3**	8	65.6	-12	9.3	11.4	13.9	15.0	8	9	19	1831	3.51
Torchmark	402.7	4	51.6	-1	12.8	13.4	13.0	22.2	10	1	18	1792	3.31
USLico	100.6	7	8.6	-18	8.6	11.2	10.6	NA	9	16	1	244	2.59
USLife	283.1	11	15.5	12	5.5	5.4	7.4	7.5	11	6	0	706	3.95
(c) SAVINGS & LOAN													
GROUP COMPOSITE	6297.1	16	188.2	-24	3.0	4.5	7.3	8.0	8	18	21	6989	2.17
Ahmanson (H. F.)	980.2**	23	39.2	30	4.0	3.8	10.9	11.2	9	18	19	1863	2.14
American Savings Bank	106.1	11	6.6	-18	6.2	8.4	NA	14.7	4	NA	NA	106	4.44
CalFed	751.3**	21	17.5	-49	2.3	5.6	10.4	8.5	5	13	15	565	4.70
Coast Savings & Loan Assn.	301.5**	10	4.9	-53	1.6	3.8	12.1	8.5	5	28	NA	216	3.15

Footnotes on page 67

ONLY 22,463 DAYS UNTIL RETIREMENT.



Seems like an eternity.

But the fact of the matter is today people are retiring sooner than ever.

The average retirement age is now 61.5, not 65. And it's getting even lower.

It's a trend that has employers worried.

Because as more and more workers retire, employers end up paying more and more in post-retirement benefits.

At the CIGNA companies, we have a solution.

We've developed a variety of voluntary, portable payroll deduction plans that help relieve the employer's post-retirement financial burden.

In each of these programs, employees are given the opportunity to plan for a financially secure retirement at economical group rates.

They can choose from contemporary insurance programs like Group Universal Life that not only provide benefits at retirement, but allow access to accumulating funds during working years as well.

There are also other options available.

Like savings and investment vehicles.

Family insurance coverages.

Supplemental disability plans.

All these employee-paid benefits supplement, and, in some cases, replace existing programs, helping to reduce an employer's post-retirement costs.

We'll handle initial enrollment, ongoing plan management, and all employee communications, tailoring each program to minimize employer administrative time. We've even implemented a toll-free hotline to answer employee questions.

For more information about how we can help with the post-retirement cost problem, write CIGNA Corp., Dept. R12, One Logan Sq., Phila., PA 19103.

Employee Marketing will benefit you and your employees now. And 22,463 days from now.

It's one more example of CIGNA's commitment to personalized service to business.



Why 1-2-3 users are occ computers for the se



It first happened about six years ago.

When you made the jump from paper ledgers to something called the PC.

If you'll recall, that little box, coupled with

Lotus® 1-2-3®, basically shot you from the Stone Age to the Industrial Revolution.

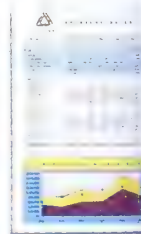
Overnight.

Six years later, just when you were

convinced the thrill was gone, a situation comes along to prove the exact opposite.

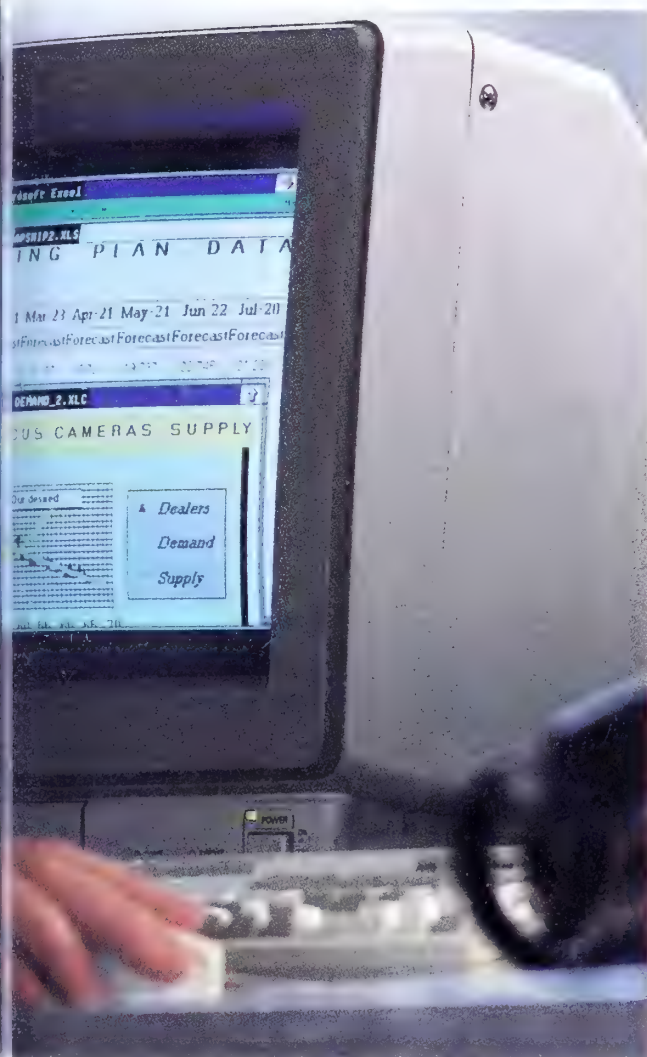
Briefly:

Character-based technology is being replaced by the remarkable power and simplicity of graphical environments: It's no secret that the PC industry is moving rapidly



Finally, output that's admired, envied and saved. Not tossed.

Discovering good time.



oward graphical platforms like Microsoft® Windows, MS® OS/2 Presentation Manager and, of course, the Macintosh®. It's a simple reality. Which means serious spreadsheet users are suddenly faced with a decision.

Stay with 1-2-3, the current character-based standard. Or move to Microsoft® Excel for Windows, the emerging standard designed expressly for graphical environments. Graphical as in

the simplest, most visual way to harness the power of the 286/386 machines—which in turn lets you easily tap all the power and glory of the spreadsheet.

We're not saying it's an easy decision. Just an inevitable one. And to help you make a more informed one, we offer the following:

Microsoft Excel lets you link multiple spreadsheets without the hassles of complex cell references—to link, you just point and click on the cells you want linked. That's it.

With Microsoft Excel you can work interactively—you can change fonts and sizes, add borders, shade areas, and see it all on screen. And, thanks to Print Preview, see exactly what you've done, *before* making a trip to the printer.

You can also create charts with a single keystroke. Make mistakes and simply “undo” them. Even adjust column widths or color without a laundry list of commands.

And no, your equity in 1-2-3 is not lost. Because Microsoft Excel actually reads and writes 1-2-3 files, guides you with 1-2-3 on-line help, and even helps you translate 1-2-3 macros. So making the switch is easier than you think.

All of which brings us back to the decision—and a simple fact: You have nothing to lose by calling for a free, fully functional Working Model of Microsoft Excel for Windows to use in a real-life situation. Yours.

It's the only way to fully appreciate the power of Microsoft Excel. And the quickest way to rekindle your long-time love affair with the PC: (800) 323-3577, Dept. J51.

We strongly suggest calling. Because if you think going from ledgers to computers was a thrill, you haven't seen anything yet.



Get a free Working Model of Microsoft Excel for Windows. After all, using is believing.

Microsoft
Making it all make sense.

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS				RETURN				5-YEAR GROWTH				MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL	12 MONTH EARNING PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-21	COMMON EQUITY %	EARNINGS PER SHARE %	COMMON EQUITY %				
					1ST QUARTER 1989 %	1ST QUARTER 1988 %										
CrossLand Savings	373.9**	12	11.8	-66	3.2	10.4	NA	4.3	5	NA	NA	NA	189	2.82		
Dime Savings Bank of N. Y.	281.2	6	6.1	-60	2.2	5.8	9.2	5.0	8	NA	NA	NA	294	1.60		
Downey Savings & Loan Assn.	97.3**	36	21.0	239	21.6	8.7	13.7	20.8	4	46	37	NA	183	4.07		
Far West Financial	133.5	32	5.6	114	4.2	2.6	NA	8.1	6	29	-7	NA	66	1.47		
Financial Corp. of Santa Barbara	119.3	-2	1.3	-15	1.1	1.3	7.4	0.7	67	34	-57	NA	12	0.03		
Glenfed (6)	652.0	11	20.2	-43	3.1	6.1	9.6	12.6	4	16	34	NA	561	4.73		
Goldome	342.2	-2	-38.8	NM	NM	NM	NM	-49.0	NM	NA	NA	NA	77	-5.30		
Golden West Financial	437.4	37	35.0	19	8.0	9.2	7.1	16.1	9	32	15	NA	1311	4.58		
Great Amer. First Savings Bank	397.4	6	11.1	-23	2.8	3.8	6.7	7.2	7	17	16	NA	308	1.95		
HomeFed	448.2**	24	30.5	24	6.8	6.8	7.0	12.3	7	11	22	NA	801	5.48		
Homestead Financial	135.4	13	2.0	NM	1.5	NM	NA	NA	11	33	20	NA	42	0.35		
Imperial Corp. of America	306.0**	14	-0.1	NM	NM	1.8	4.6	2.1	14	10	79	NA	77	0.39		
Northeast Savings (9)	191.5**	10	1.6	-69	0.8	2.9	NA	-8.6	NM	NA	NA	NA	41	-4.58		
Standard Federal Bank	242.6**	19	12.9	4	5.3	6.1	NA	14.5	5	NA	NA	NA	274	1.92		
18 OFFICE EQUIPMENT & COMPUTERS																
INDUSTRY COMPOSITE	41249.4	10	2274.9	-14	5.5	7.0	11.4	14.1	14	12	3	157506	3.47			
(a) BUSINESS MACHINES, SERVICES & SUPPLIES																
GROUP COMPOSITE	3201.6	12	172.4	9	5.4	5.5	13.3	17.7	14	18	14	10352	2.09			
American Business Products	98.3	12	3.3	8	3.4	3.5	12.8	13.9	12	8	6	NA	157	2.31		
Businessland (6)	293.3	17	8.5	58	2.9	2.1	12.9	16.2	12	16	562	NA	340	1.07		
Deluxe	316.9	11	30.5	-10	9.6	11.8	23.1	24.7	17	16	16	NA	2380	1.64		
Dennison Mfg.	180.3	9	6.5	12	3.6	3.5	13.3	15.1	11	3	7	NA	432	2.46		
Esselte Business Systems	367.0	3	16.5	-1	4.5	4.6	10.7	12.6	12	19	19	NA	718	2.86		
HON Industries	146.9	12	9.6	114	6.5	3.4	16.9	20.9	14	6	15	NA	425	1.68		
LDI (11)	111.0**	164	2.5	37	2.2	4.3	5.1	15.9	12	NA	NA	NA	74	1.30		
Miller (Herman) (7)	192.6	6	10.9	-8	5.7	6.5	14.3	16.8	12	15	14	NA	516	1.78		
Nashua	239.9	0	2.6	-63	1.1	2.9	12.8	12.3	13	17	25	NA	374	2.93		
Pitney-Bowes	669.7	13	53.5	12	8.0	8.0	12.7	19.2	14	18	14	NA	3467	3.07		
Reynolds & Reynolds (3)	155.5	3	7.5	596	4.8	0.7	11.2	13.9	11	20	5	NA	328	2.69		
Softsel Computer Products	147.7	36	2.6	44	1.7	1.6	22.7	40.6	9	NA	NA	NA	67	0.73		
Standard Register	171.6	7	8.5	-4	5.0	5.6	11.0	NA	15	20	11	NA	562	1.27		
Wallace Computer Services (5)	110.9	15	9.5	13	8.6	8.7	13.0	15.0	15	17	12	NA	513	3.25		
(b) COMPUTERS & PERIPHERALS																
GROUP COMPOSITE	33253.0	8	1752.0	-19	5.3	7.0	11.2	13.5	13	11	3	129734	4.63			
Amdahl	470.3	28	45.6	7	9.7	11.6	18.0	21.4	10	22	38	NA	2073	2.01		
Apollo Computer	204.7	21	5.5	-47	2.7	6.2	NM	-2.1	NM	20	-45	NA	465	-0.13		
Apple Computer (3)	1246.9	44	56.4	-29	4.5	9.2	26.0	34.6	13	22	42	NA	4943	3.09		
AST Research (6)	113.8	8	-1.3	NM	NM	5.0	1.0	-2.1	NM	83	7	NA	98	-0.21		
Compaq Computer	682.9	55	83.2	78	12.2	10.7	25.7	32.4	11	54	109	NA	3071	7.05		
Control Data	843.5	-6	3.5	-55	0.4	0.9	0.3	0.0	NM	-12	-45	NA	878	-0.07		
Cray Research	116.1	-20	1.5	-94	1.3	18.1	17.3	19.5	13	34	43	NA	1616	4.19		
Data General (3)	342.7	-2	7.0	-65	2.0	5.7	NM	-9.4	NM	4	NA	NA	504	-2.12		
Digital Equipment (6)	3125.8	11	256.4	-16	8.2	10.8	15.2	15.4	11	17	35	NA	11875	9.02		
Hewlett-Packard (2)	2657.0	21	193.0	8	7.3	8.2	17.0	17.9	16	10	10	NA	13383	3.48		
International Business Machines	12730.0	6	950.0	2	7.5	7.7	11.3	13.9	12	12	-2	NA	66936	9.31		
NCR	1250.5	-2	61.1	-18	4.9	5.8	16.1	19.0	11	2	14	NA	4568	5.24		
Prime Computer	387.0	6	-5.0	NM	NM	4.0	3.3	-0.1	NM	15	-13	NA	955	0.01		
Tandem Computers (3)	363.4	17	16.9	-28	4.6	7.5	10.1	10.4	18	23	24	NA	1658	0.97		
Tandy (6)	943.7	12	66.7	4	7.1	7.6	19.0	17.6	13	9	4	NA	4061	3.61		
Unisys	2201.8	-7	-78.7	NM	NM	6.3	8.7	9.8	12	9	19	NA	4162	2.15		
Wang Laboratories (6)	759.4	-1	-63.7	NM	NM	3.0	NM	-2.3	NM	10	-18	NA	1304	-0.22		
Xerox	4139.0**	8	158.0	4	3.8	4.0	7.2	6.9	18	6	1	NA	6686	3.61		
Zenith Electronics	674.5	17	-4.0	NM	NM	0.1	0.6	0.2	NM	5	NA	NA	497	0.03		
(c) COMPUTER SOFTWARE & SERVICES																
GROUP COMPOSITE	4794.9	19	350.5	6	7.3	8.4	13.2	18.6	17	29	20	17421	1.33			
AM International (5)	206.7	6	5.8	16	2.8	2.6	2.7	-1.3	NM	29	-48	NA	307	-0.06		
Automatic Data Processing (6)	454.0**	9	56.2	10	12.4	12.3	16.5	20.0	16	20	19	NA	2951	2.43		
Comdisco (3)	437.0**	41	25.0	25	5.7	6.5	11.8	20.3	10	23	20	NA	993	2.30		
Computer Sciences (9)	360.2	17	16.8	22	4.7	4.5	NA	13.7	16	20	15	NA	809	3.28		
Conner Peripherals	130.9	207	5.7	70	4.3	7.8	17.9	21.0	15	NA	NA	NA	326	0.63		
Diebold	114.4	7	7.6	11	6.6	6.4	8.6	8.9	18	8	-10	NA	568	2.44		
Electronic Data Systems	1287.9**	15	100.0	12	7.8	7.9	23.1	28.1	15	43	48	NA	2393	3.24		
Intergraph	185.7	6	19.5	14	10.5	9.8	13.8	13.6	11	33	15	NA	982	1.60		
Lotus Development	120.0	2	5.3	-71	4.4	15.6	14.5	19.8	22	29	31	NA	943	1.03		
Maxtor (9)	97.7	14	1.4	-77	1.4	7.1	4.5	4.1	39	NA	424	NA	198	0.26		
Microamerica	131.5	NA	2.5	NA	1.9	NA	NA	NA	NA	NA	NA	NA	98	NA		
Microsoft (6)	197.0	22	41.1	10	20.9	23.1	NA	33.4	20	88	63	NA	2986	2.77		
Oracle Systems (7)	153.4	101	24.0	85	15.6	17.0	NA	34.9	29	208	172	NA	1798	1.01		
Seagate Technology (6)	357.6	5	21.5	-7	6.0	6.8	NM	-1.8	NM	29	51	NA	642	-0.14		
Storage Technology	210.6	7	3.1	-71	1.4	5.4	13.2	12.9	10	36	NA	NA	371	0.16		
3Com (7)	107.1	62	10.7	62	10.0	10.0	NA	17.6	22	70	186	NA	711	1.16		
Western Digital (6)	243.2	28	4.4	-46	1.8	4.3	10.5	15.0	8	58	62	NA	345	1.56		

Footnotes on page 67



You're never
too busy for
your customers.
Why should
your phones be?

If your lines are too busy to help customers, soon you won't have customers to keep you busy. This is the premise driving MCI 800 Service:SM the most flexible toll-free service in existence.

800 SERVICE

Because it's designed to accomplish just one goal: make sure you get the calls that are coming to you.

It achieves this with innovations such as Direct Termination Overflow. An ingenious system that automatically reroutes any call overflow from your 800 lines to your regular business lines. Something you can't get from AT&T.

MCI's advanced 800 routing system also allows you to route calls to different locations, or even terminate multiple numbers to a single location. Of course, we've always offered distance sensitive pricing. So you're charged only for the actual distance of each call. And our itemized call detail lists the origin of each call. All on one report. Something else you don't get from AT&T.

MCI 800 Service. It works harder to get you more incoming calls. And that will have a direct effect on your income.

MCI 800 Service. Another reason why we are the better long distance company.SM 1-800-888-0800.

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4Q1 \$ MIL.	12 MONTHS EARNING PER SHARE
	1ST QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	1ST QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	PER 4Q1	COMMON EQUITY %	EARNINGS PER SHARE %		
					1ST QUARTER 1991 %	1ST QUARTER 1990 %							
19 PAPER & FOREST PRODUCTS													
INDUSTRY COMPOSITE	19936.3	11	1521.7	22	7.6	6.9	10.9	17.6	8	9	26	47934	4.58
FOREST PRODUCTS GROUP COMPOSITE	6919.7	12	569.5	56	8.2	5.9	11.6	17.6	9	6	32	15043	4.16
Boise Cascade	1099.1	8	78.3	14	7.1	6.7	12.6	17.8	7	5	39	2016	6.61
Georgia-Pacific	2447.0	16	254.0	140	10.4	5.0	12.4	23.3	9	7	34	4445	5.41
Louisiana-Pacific	487.8	13	39.9	41	8.5	6.8	10.3	12.9	8	10	40	1221	3.86
Pope & Talbot	147.5	27	9.4	19	6.4	6.9	13.8	20.6	8	8	33	255	2.81
Weyerhaeuser	2321.3	9	148.1	29	6.4	5.4	10.5	14.3	10	5	26	5931	2.84
Willamette Industries	437.8	8	39.8	-1	9.1	10.0	14.3	21.5	7	13	41	1175	6.32
PAPER GROUP COMPOSITE	13016.6	10	952.3	9	7.3	7.4	10.5	17.6	8	10	23	32891	4.80
Bowater	358.7	5	38.9	2	10.8	11.1	12.6	19.3	6	20	14	1013	4.41
Champion International	1288.7	2	113.5	11	8.8	8.1	9.9	14.0	7	13	34	3076	4.92
Chesapeake	188.0	17	12.9	30	6.8	6.1	11.4	19.5	9	8	31	483	2.66
Consolidated Papers	242.4	5	43.4	10	17.9	17.1	17.9	21.4	11	14	18	1656	3.54
Fort Howard	455.5	7	-35.7	NM	NM	8.5	NM	-16.6	NA	-6	NA	NA	NA
Glatfelter (P. H.)	155.4	14	24.4	33	15.7	13.5	21.4	26.3	12	13	23	1078	3.64
Great Northern Nekoosa	986.4	17	93.3	19	9.5	9.3	13.5	23.3	6	11	28	2215	6.47
International Paper	2600.0	13	223.0	40	8.6	6.9	12.1	17.5	7	7	34	5538	7.15
James River Corp. of Virginia	1386.4	12	59.0	20	4.3	4.0	7.0	11.0	11	44	2	2361	2.69
Kimberly-Clark	1431.8	10	103.1	11	7.3	7.2	14.0	20.8	13	4	17	5103	4.83
Mead	1128.9	4	52.6	-20	4.7	6.1	14.2	22.4	7	11	46	2368	5.34
Pentair	274.8	41	9.0	1	3.3	4.6	8.9	17.2	8	14	11	324	3.61
Scott Paper	1268.9	13	86.5	17	6.8	6.6	13.1	21.2	8	5	27	3141	5.37
Union Camp	706.2	9	79.7	18	11.3	10.5	12.6	19.7	8	5	15	2537	4.46
Westvaco	554.6	11	48.7	29	8.8	7.5	9.9	15.6	9	9	18	1998	3.27
20 PUBLISHING & BROADCASTING													
INDUSTRY COMPOSITE	9860.1	4	910.3	1	9.2	9.5	12.6	18.2	20	14	14	71980	2.74
BROADCASTING GROUP COMPOSITE	2190.7	-4	163.5	22	7.5	5.9	10.8	15.8	23	39	13	17829	4.84
American TV & Communications	231.7	20	19.8	13	8.5	9.1	7.9	27.7	67	-21	NA	4876	0.67
Capital Cities/ABC	1120.4	-13	82.8	18	7.4	5.5	10.3	13.2	18	41	19	7470	22.68
CBS	731.2	5	56.3	26	7.7	6.4	10.9	12.8	16	6	4	4432	11.46
Multimedia	106.3	8	4.6	319	4.4	1.1	30.1	-5.7	38	NA	-5	1052	2.47
PUBLISHING GROUP COMPOSITE	7669.4	6	746.8	-3	9.7	10.6	13.4	19.0	20	12	14	54151	2.44
Affiliated Publications	130.4	3	-9.9	NM	NM	NM	NM	-39.3	NM	15	NA	2974	-1.10
Commerce Clearing House	215.4**	17	28.8	8	13.4	14.5	19.4	24.0	19	20	13	997	2.87
Dow Jones	406.8	4	200.0	93	49.2	26.4	22.1	28.0	10	22	15	3391	3.26
Dun & Bradstreet	1039.8	5	143.3	15	13.5	12.4	24.9	24.7	19	24	16	10038	2.77
Gannett	817.6	8	74.9	1	9.2	9.8	13.3	20.5	18	12	13	6704	2.27
Knight-Ridder	540.7	10	20.7	-37	3.8	6.7	10.3	16.4	20	1	8	2536	2.41
McGraw-Hill	416.1	5	23.2	-14	5.6	6.8	18.6	19.7	21	8	8	3749	3.74
Media General	149.3**	-20	10.9	3	8.0	6.2	3.1	3.7	94	2	-19	898	0.37
Meredith	196.7	18	4.7	17	2.4	2.4	8.2	8.7	20	13	0	636	1.70
New York Times	423.1	1	31.5	-28	7.5	10.5	12.6	17.0	15	17	15	2278	1.86
Scripps (E. W.)	294.9	5	15.1	36	5.1	3.9	8.7	11.8	21	NA	NA	1594	0.97
Time	1135.0	7	49.0	-26	4.3	6.2	9.8	20.0	25	8	16	6626	4.75
Times Mirror	840.9	9	68.8	-8	8.1	9.7	13.1	19.3	15	8	12	4839	2.53
Tribune	552.9	6	36.8	14	6.7	6.2	12.1	18.1	17	10	23	3545	2.86
Washington Post	341.9	8	41.5	-70	12.1	45.1	16.2	19.1	18	21	32	2958	12.88
Western Publishing Group	141.0**	8	8.5	17	4.6	4.2	20.9	18.5	13	NA	NA	388	1.45
21 SERVICE INDUSTRIES													
INDUSTRY COMPOSITE	13336.5	18	555.0	17	4.2	4.2	10.5	13.6	22	8	14	43495	1.46
CONSTRUCTION & ENGINEERING GROUP COMPOSITE	4189.0	21	79.5	19	1.9	1.9	-0.3	-2.1	NM	-8	2	6052	-0.24
Apogee Enterprises	122.3	36	3.2	27	2.6	2.8	10.7	16.6	15	13	11	204	1.00
Butler Mfg.	130.6	-3	2.5	20	1.9	1.6	11.3	12.7	12	-4	31	183	3.50
CDI	205.3	19	4.6	59	2.2	1.8	14.1	22.0	14	14	35	250	1.83
Combustion Engineering	866.4	15	11.6	-15	1.3	1.8	NM	-4.7	NM	-3	NA	1098	-6.41
CRS Sirtine	149.0	24	3.6	82	2.4	1.6	15.1	16.0	18	3	12	185	1.78
EG&G	390.9	18	15.7	0	4.3	5.0	20.8	20.7	14	12	6	949	2.30
Fluor	1420.4	37	21.6	140	1.5	0.9	10.6	11.0	28	-22	NA	1960	0.87
Foster Wheeler	252.1	5	7.0	-24	2.8	3.8	6.4	5.8	24	4	-25	626	0.75
Jacobs Engineering Group	190.7	-2	2.4	49	1.3	0.8	14.0	15.2	18	3	65	144	1.52
Morrison Knudsen	461.2	12	6.3	-11	1.4	1.7	NM	-16.8	NM	-5	NA	454	-3.49

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suspension mate your tires to the curving pavement — all this must be experienced.

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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL.	12 MONTH EARNING PER SHARE
	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P.E. 4-21	COMMON EQUITY %	EARNINGS PER SHARE %			
(b) INDUSTRIAL DISTRIBUTION														
GROUP COMPOSITE	4246.7	8	168.5	10	4.0	3.9	13.2	16.0	15	9	9	10106	1.94	
AAR (7)	102.3	10	6.0	16	5.9	5.6	NA	15.0	18	25	33	437	1.51	
Arrow Electronics	237.9	-8	2.1	-47	0.9	1.6	NM	1.6	27	15	NA	66	0.21	
Avnet (6)	474.9	2	10.7	-21	2.3	2.9	6.2	6.7	17	5	-12	789	1.34	
Bearings (6)	165.4	18	4.4	22	2.7	2.6	15.0	13.7	12	1	7	201	3.42	
Bell Industries (6)	100.8	-5	0.9	-57	0.9	2.0	9.3	NA	10	10	-7	96	1.73	
Castle (A. M.)	141.3	16	3.6	-2	2.5	3.0	12.4	NA	8	5	13	101	2.82	
Genuine Parts	771.0	10	45.0	11	5.8	5.8	20.6	21.5	16	5	12	3065	2.41	
Getty Petroleum (11)	298.3**	-19	9.8	23	3.3	2.2	19.4	28.7	9	24	92	245	2.35	
Grainger (W. W.)	393.6	13	27.6	14	7.0	6.9	16.2	17.7	14	9	15	1539	4.07	
Jorgensen (Earle M.)	138.9	21	5.2	80	3.7	2.5	7.8	7.7	17	-3	-3	189	1.79	
Marshall Industries (7)	133.7	24	5.3	10	4.0	4.5	14.2	17.9	8	41	22	167	2.39	
Morgan Products	105.5	8	0.2	-84	0.2	1.5	6.1	4.8	30	46	-15	126	0.50	
Premier Industrial (7)	146.2	13	15.6	4	10.7	11.6	30.7	34.0	17	11	15	1107	1.64	
Safety-Kleen	101.2	13	10.0	13	9.9	10.0	14.2	20.1	22	26	20	966	1.30	
United Stationers (4)	246.9	15	7.1	21	2.9	2.7	12.0	16.4	15	24	12	379	1.67	
Univar (10)	315.6	16	4.6	84	1.5	0.9	12.7	18.0	13	-4	-19	253	2.27	
VWR (10)	141.6	2	4.4	59	3.1	2.0	11.0	14.2	10	NA	NA	99	1.91	
Willcox & Gibbs	134.4	48	4.3	27	3.2	3.7	16.0	16.4	13	40	26	191	1.47	
Wyle Laboratories (11)	97.3	6	1.5	6	1.6	1.6	7.4	8.4	11	13	-15	89	0.77	
(c) POLLUTION CONTROL														
GROUP COMPOSITE	2232.3	30	214.1	23	9.6	10.1	13.1	20.4	22	27	NA	19917	1.73	
Browning-Ferris Industries (3)	594.9	23	58.8	17	9.9	10.4	15.2	22.4	20	22	20	4820	1.63	
Chemical Waste Management	189.8	33	29.0	27	15.3	16.0	21.4	22.2	26	77	NA	3188	1.23	
RC Holding (2)	149.2	69	-3.0	NM	NM	NM	NM	NA	NA	-35	NA	NA	NA	
Waste Management	958.9	25	115.5	22	12.1	12.4	13.4	22.3	22	25	28	10717	2.14	
Wheelabrator Technologies	339.5	40	13.8	53	4.1	3.7	6.7	9.0	23	NA	NA	1192	1.11	
(d) PRINTING & ADVERTISING														
GROUP COMPOSITE	1360.9	16	54.2	6	4.0	4.4	11.8	12.7	15	14	12	4833	2.00	
Advo-System (3)	139.3	2	-3.2	NM	NM	0.6	NM	-39.3	NM	NA	NA	81	-1.12	
Banta (George)	137.0	82	5.1	2	3.8	6.7	10.1	12.9	13	18	6	282	1.68	
Donnelley (R. R.) & Sons	707.6	11	40.8	12	5.8	5.7	12.2	NA	14	13	13	3175	2.93	
Interpublic Group	276.5**	14	8.0	20	2.9	2.7	18.4	18.5	15	16	16	981	2.77	
Krueger (W. A.)	100.5	19	3.5	47	3.5	2.8	8.0	11.1	26	15	0	313	0.40	
(e) OTHER SERVICES														
GROUP COMPOSITE	1307.7	30	38.7	37	3.0	2.8	11.9	17.3	15	22	18	2587	1.54	
Adia Services	141.9**	23	5.0	19	3.5	3.6	12.7	12.6	15	70	32	284	1.53	
American Building Maintenance (2)	152.1	10	1.5	14	1.0	0.9	10.3	11.6	18	2	-7	130	1.90	
Commtron (4)	123.9**	17	1.5	198	1.2	0.5	12.2	12.6	13	51	-11	80	0.63	
Handleman (8)	194.6	27	13.5	31	6.9	6.7	NA	21.3	17	19	24	670	1.86	
JWP	344.9	98	7.8	39	2.3	3.2	11.1	20.7	14	59	50	421	2.37	
National Education	99.5	0	7.0	8	7.0	6.6	17.7	25.2	14	28	0	625	1.58	
Olsten	140.6**	22	4.0	20	2.8	2.9	15.0	NA	17	20	32	295	1.45	
Volt Information Sciences (2)	110.2	2	-1.5	NM	NM	NM	2.8	1.2	95	-4	NA	82	0.14	
22 TELECOMMUNICATIONS														
INDUSTRY COMPOSITE	37540.8	6	3487.4	35	9.3	7.3	6.7	10.6	20	4	6	192534	2.29	
(a) EQUIPMENT & SERVICES														
GROUP COMPOSITE	12688.3	8	856.4	NM	6.8	NM	-2.8	-9.2	NM	-19	NA	52887	-0.87	
American Telephone & Telegraph	8659.0	3	594.0	21	6.9	5.9	NM	-13.7	NM	-21	NA	37310	-1.46	
Communications Satellite	97.4	16	16.5	16	16.9	16.9	6.8	11.6	9	-2	-5	531	3.47	
Communications Transmission (7)	102.6	451	-3.6	NM	NM	7.0	NA	NM	NM	NA	NA	84	-1.79	
LPL Investment Group	143.9	1	16.9	NM	11.7	1.0	8.9	53.4	4	NA	NA	98	4.30	
M/A-Com (3)	106.1	-2	3.0	-35	2.8	4.2	6.6	7.0	14	-12	-5	186	0.57	
MCI Communications	1500.0	33	145.0	150	9.7	5.1	16.4	31.2	20	4	11	8049	1.64	
Telecom-USA	155.0	31	8.5	50	5.5	4.8	13.9	18.2	23	177	NA	692	1.14	
United Telecommunications	1766.1	18	76.4	116	4.3	2.4	2.1	9.6	33	1	-10	5849	1.75	
Western Union	158.2	-33	-0.2	NM	NM	NM	NM	57.1	NM	-25	NA	86	-12.67	
(b) TELEPHONE COMPANIES														
GROUP COMPOSITE	24852.4	5	2630.9	1	10.6	11.0	8.7	14.4	13	5	7	139224	4.17	
Alltel	275.9	5	39.0	15	14.1	12.8	9.9	16.7	14	15	10	1861	3.08	
Ameritech	2500.7	4	300.8	2	12.0	12.2	9.4	15.8	12	2	8	14806	4.60	
Bell Atlantic	2766.7	5	348.8	6	12.6	12.5	8.4	14.6	12	5	7	15638	6.76	
BellSouth	3367.6	5	381.2	-12	11.3	13.5	8.7	13.6	13	6	5	21056	3.43	
Centel	281.5	10	0.7	-98	0.2	11.5	6.0	8.6	51	6	0	3688	0.86	
Cincinnati Bell	222.5	29	24.6	22	11.1	11.7	10.4	17.7	17	6	14	1493	2.76	
Centel	748.0	13	64.0	5	8.6	9.2	10.2	20.0	14	5	-2	4286	3.98	
GTE	4122.6	5	329.2	15	8.0	7.3	8.2	15.0	13	4	0	15458	3.71	
Nynex	3234.7	5	283.6	-9	8.8	10.1	9.1	13.7	11	5	7	14451	6.54	
Pacific Telesis Group	2343.0	2	317.0	6	13.5	13.0	8.9	14.9	13	5	6	15604	2.86	
Rochester Telephone	130.9	15	12.4	9	9.4	10.0	9.1	15.2	14	6	2	698	4.42	

Footnotes on page 67



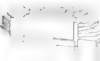
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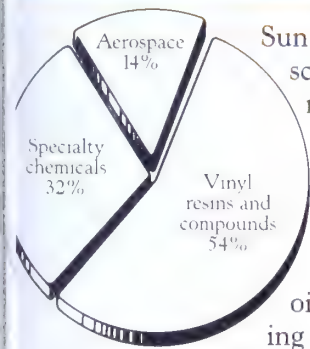
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CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-21 \$ MIL.	12 MONTH EARNINGS PER SHARE
	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL.	CHANGE FROM 1988 %	1ST QUARTER 1989	1ST QUARTER 1988	ON INVESTED CAPITAL	ON COMMON EQUITY	P/E 4-21	COMMON EQUITY	EARNINGS PER SHARE			
Southern New England Tel.	407.1**	9	41.3	13	10.1	9.8	8.2	13.9	14	7	5	2186	5.13	
Southwestern Bell	2057.6	3	238.8	9	11.6	10.9	8.6	12.7	13	5	4	14232	3.60	
US West	2393.6	9	249.6	4	10.4	11.0	8.4	14.5	10	4	7	11586	6.24	
23 TRANSPORTATION														
INDUSTRY COMPOSITE	24322.5	13	990.0	72	4.1	2.7	8.3	13.1	11	4	1	52509	3.34	
a AIRLINES														
GROUP COMPOSITE	10453.3	20	281.0	34	2.7	0.7	11.5	21.1	9	18	14	15579	6.94	
Alaska Air Group	197.7	14	6.4	NM	3.2	NM	10.6	14.7	10	30	-2	424	2.84	
America West Airlines	233.1	37	6.4	NM	2.8	NM	8.8	15.3	21	21	NA	178	0.55	
AMR	2451.0	25	101.0	48	4.1	3.5	9.8	15.9	8	20	4	3726	8.39	
Braniff	125.4	58	-13.2	NM	NM	NM	NM	NM	NM	0	NA	124	-1.78	
Delta Air Lines	2038.1	19	85.0	52	4.2	3.3	11.6	NA	9	20	6	3277	7.61	
Midway Airlines	117.3	31	1.8	NM	1.6	NM	NA	13.6	15	13	NA	150	1.01	
NWA	1477.8	19	12.6	NM	0.9	NM	7.6	11.7	16	15	11	2986	6.54	
UAL	2327.9	13	65.4	134	2.8	1.4	24.2	52.0	6	4	13	2744	22.65	
USAir Group	1485.0	19	15.5	NM	1.0	NM	7.3	NA	10	29	1	1970	4.60	
b RAILROADS														
GROUP COMPOSITE	7571.9	3	441.3	10	5.8	5.4	6.4	10.1	13	-3	-2	25169	2.64	
Burlington Northern	1125.5	-4	33.2	-17	3.0	3.4	7.6	21.7	9	-20	-13	1715	2.67	
CNW	248.1	2	21.0	170	8.5	3.2	11.4	15.5	9	11	9	680	4.60	
Consolidated Rail	872.0	5	60.0	25	6.9	5.8	7.3	7.9	8	46	-7	2407	4.63	
CSX	1844.0	6	77.0	67	4.2	2.6	NM	-0.6	90	-5	NA	3454	0.36	
Norfolk Southern	1110.0	7	133.8	13	12.1	11.5	8.2	12.6	9	4	0	5714	3.62	
Santa Fe Southern Pacific	690.1	-5	-22.5	NM	NM	0.6	7.6	24.8	30	-31	-11	3542	0.76	
Soo Line	131.1	-15	0.6	-87	0.5	3.1	4.9	4.3	15	-1	NA	176	1.21	
Union Pacific	1551.2	6	138.2	6	8.9	9.0	8.0	12.6	13	0	7	7482	5.00	
c TRANSPORTATION SERVICES														
GROUP COMPOSITE	3728.1	12	72.0	108	1.9	1.0	7.1	9.7	16	13	18	6052	1.76	
Airborne Freight	218.4	24	2.7	30	1.2	1.2	5.4	6.0	24	14	-11	180	1.09	
Federal Express	1283.8	31	24.8	-32	1.9	3.7	10.1	12.8	14	20	12	2417	3.44	
Gatx	155.0**	28	17.4	87	11.2	7.7	7.5	20.8	10	-14	21	527	5.86	
PHH	420.9	15	13.2	16	3.1	3.1	NA	6.3	27	11	-9	583	1.28	
Ryder System	1222.8	5	26.2	NM	2.1	NM	7.7	12.0	11	19	5	1993	2.27	
Subaru of America	427.3	-17	-12.3	NM	NM	0.1	NM	-32.5	NM	8	NA	352	-1.45	
d TRUCKING & SHIPPING														
GROUP COMPOSITE	2569.2	24	195.6	155	7.6	3.7	15.8	20.0	10	8	7	5708	2.98	
Alexander & Baldwin	336.8**	20	135.3	337	40.2	20.2	27.7	40.0	8	7	23	1879	4.95	
Carolina Freight	149.0	3	1.5	228	1.0	0.3	6.2	8.3	15	18	-9	159	1.66	
Consolidated Freightways	726.1	18	21.2	26	2.9	2.7	12.5	15.3	10	7	10	1193	3.11	
Hunt (J. B.) Transport Services	111.3	26	4.9	-15	4.4	6.6	14.2	21.4	15	37	26	472	1.37	
Preston	152.4	10	1.1	130	0.7	0.3	6.3	7.0	11	4	-24	84	1.38	
Roadway Services	563.2	20	15.7	23	2.8	2.7	NA	12.4	14	5	-9	1164	2.08	
Yellow Freight System	529.9	14	15.8	68	3.0	2.0	11.9	18.4	10	11	5	759	2.62	
24 UTILITIES														
INDUSTRY COMPOSITE	38443.2	4	4081.9	0	10.6	11.1	6.6	9.9	12	5	-1	132168	2.14	
a ELECTRIC & WATER														
GROUP COMPOSITE	29127.7	5	3482.0	1	12.0	12.5	6.7	10.3	12	8	0	115365	2.21	
Allegheny Power System	590.1	-4	67.1	-6	11.4	11.6	7.9	13.2	9	6	3	1890	3.87	
American Electric Power	1263.0	4	175.9	-9	13.9	15.8	8.5	14.5	8	3	4	5153	3.16	
Atlantic Energy	160.8	11	15.3	18	9.5	8.9	8.2	13.4	9	4	3	655	3.65	
Baltimore Gas & Electric	523.9	4	70.5	-14	13.5	16.2	8.5	13.9	9	7	7	2419	3.31	
Boston Edison	296.3	-1	11.8	25	4.0	3.2	6.5	8.7	8	9	-1	602	1.89	
Carolina Power & Light	604.0	7	104.1	7	17.2	17.2	5.5	7.4	17	9	-6	2863	2.13	
Centerior Energy	555.2	10	84.7	11	15.3	15.0	NM	-3.3	NM	19	NA	2236	-0.65	
Central & South West	576.0	3	80.0	8	3.9	13.2	8.0	12.7	9	7	3	3020	3.50	
Central Illinois Public Service	162.8	-1	17.2	5	10.5	9.9	7.3	13.6	9	3	0	730	2.37	
Cincinnati Gas & Electric	410.3	-2	63.0	-8	15.4	16.4	10.6	17.5	6	5	4	1312	4.11	
CMS Energy	922.6		112.1	31	12.1	9.3	9.0	18.1	7	-5	4	2181	3.64	
Commonwealth Edison	1363.0	14	139.5	-1	10.2	11.8	6.4	9.1	11	9	-5	7112	3.00	
Consolidated Edison Co. of N. Y.	1386.7	5	152.5	-1	11.0	11.7	8.6	13.3	10	2	2	5344	4.91	
Delmarva Power & Light	209.4	4	23.8	-5	11.4	12.5	7.1	12.5	11	4	0	808	1.66	
Detroit Edison	790.1	5	102.7	NM	13.0	1.0	NM	-8.4	NM	-2	NA	2734	-1.26	
Dominion Resources	925.9**	15	107.2	-24	11.6	10.5	7.9	12.5	10	7	8	4096	4.14	
DPL	283.2	-6	56.2	-6	19.8	19.7	NA	14.4	9	3	4	1050	2.93	
Duke Power	863.2	-6	127.3	-6	14.7	14.7	7.3	11.2	12	5	2	4608	3.83	
Duquesne Light	270.0	25	32.0	-4	11.9	15.4	6.9	11.0	9	-1	-5	1048	1.94	
Florida Progress	473.0	-3	41.7	-13	8.8	9.8	7.9	13.2	10	NA	7	1749	3.40	
FPL Group	1365.8	2	81.8	-21	6.0	7.7	7.7	13.1	9	9	6	4016	3.25	
Hawaiian Electric Industries	200.1	18	18.5	27	9.2	8.6	8.6	13.0	10	11	5	631	2.98	
Ipalco Enterprises	151.8	-4	27.3	1	18.0	17.1	8.6	14.7	9	8	6	859	2.65	
Kansas City Power & Light	163.2	-1	17.7	-2	10.9	11.0	6.8	12.2	9	4	-8	936	3.19	

Footnotes on page 67

We'll Help Keep Your Birthday Suit From Getting Wrinkled.



Sun worshippers rely on sunscreens, suntan lotions, and moisturizers.

But here's the rub. Oil and water don't mix. So manufacturers of personal care products use emulsion stabilizers to keep oil and water from separating and to keep oil uniformly suspended in dispensers.

We developed Carbopol®—a key emulsion stabilizer—back in the '50s. Our newest version—Quickbreak®—allows fast and even application to the skin.

Today, many multinational cosmetic companies formulate their largest selling brands with Carbopol.

Carbopol is just one of the many high-performance resins and special-purpose products produced by our Specialty Chemical business segment. In 1988, more than one-third of specialty chemical revenues came from outside North America. And despite substantial investments in R&D, operating income rose a hearty 20 percent.

Overall last year, BFGoodrich earnings grew over 80 percent to \$196 million. Return on equity was 19.4 percent. And our debt-to-capital ratio was 23 percent.

Which made our \$2.4 billion company one of the healthiest under the sun.

BFGoodrich
Chemicals and Aerospace

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING \$ MIL	12 MONTH EARNIN- G PER SHARE
	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 \$ MIL	CHANGE FROM 1988 %	1ST QUARTER 1989 %	1ST QUARTER 1988 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4:21	COMMON EQUITY %	EARNINGS PER SHARE %			
Louisville Gas & Electric	190.7	2	23.0	21	12.1	10.2	7.4	13.8	9	7	3	690	3.88	
Montana Power	218.4**	6	35.4	32	16.2	13.0	7.4	9.9	11	7	-6	853	3.18	
New England Electric System	427.6	7	43.6	-13	10.2	12.6	NM	-5.7	NM	7	NA	1325	-1.05	
New York State Electric & Gas	413.1	15	67.7	3	16.4	18.2	7.9	13.7	8	0	-14	1311	2.84	
Niagara Mohawk Power	848.5	5	71.2	-37	8.4	14.0	NA	6.3	13	-2	-38	1628	0.89	
Northeast Utilities	559.6	4	69.3	5	12.4	12.3	7.0	12.5	9	6	-5	2133	2.12	
Northern States Power	560.6	2	71.0	11	12.7	11.6	7.3	14.1	10	6	2	2025	3.21	
Ohio Edison	546.7	4	101.6	7	18.6	18.0	6.8	7.7	16	9	-9	3126	1.28	
Pacific Gas & Electric	2109.1	13	244.4	79	11.6	7.3	4.6	1.0	NM	8	NA	7457	0.17	
Pennsylvania Power & Light	613.1	1	101.2	-9	16.5	18.4	7.6	13.2	10	2	4	2662	3.60	
Philadelphia Electric	890.4	5	143.3	-11	16.1	19.0	8.8	12.5	9	7	-2	4287	2.21	
Pinnacle West Capital	332.4	6	29.1	-25	8.8	12.4	0.8	-0.3	NM	7	-47	1203	-0.06	
Portland General	221.1	5	40.9	5	18.5	18.6	8.2	11.2	10	2	-10	1014	2.13	
Potomac Electric Power	302.8	0	27.8	-13	9.2	10.6	7.9	15.8	10	8	10	1877	2.09	
Public Service Co. of Colorado	544.7	-4	43.7	-31	8.0	11.3	7.5	10.7	12	0	2	1108	1.76	
Public Service Enterprise Group	1298.8	8	162.5	2	12.5	13.3	8.1	13.5	9	7	1	5031	2.59	
Puget Sound Power & Light	274.3	24	50.5	4	18.4	21.9	8.2	13.3	9	3	4	1013	2.15	
Rochester Gas & Electric	244.9	0	28.1	-9	11.5	12.7	NA	12.2	8	-1	-20	531	2.16	
San Diego Gas & Electric	499.4	-3	35.9	-32	7.2	10.2	8.2	13.1	13	5	0	2110	2.88	
Scana	285.8	-5	35.9	-12	12.6	13.6	7.3	12.9	11	5	5	1229	2.87	
SCEcorp	1530.3	15	128.9	0	8.4	9.7	8.8	15.1	9	8	1	7073	3.49	
Southwestern Public Service (4)	184.7	-5	21.1	-17	11.4	13.1	8.9	14.9	11	6	-1	1064	2.27	
Teco Energy	248.7	0	29.2	-5	11.8	12.3	8.4	15.2	11	8	5	1348	2.10	
Union Electric	449.4	-3	36.1	-25	8.0	10.4	7.6	13.3	10	4	0	2438	2.46	
Utilicorp United	220.2	-3	17.6	14	8.0	6.8	8.5	12.6	9	24	3	373	2.03	
Washington Water Power	173.9	12	28.5	2	16.4	18.0	8.2	12.5	10	3	-4	608	2.62	
Wisconsin Energy	428.2	-2	64.4	-13	15.0	16.8	NA	14.1	10	8	7	1800	2.59	
(b) GAS & TRANSMISSION GROUP COMPOSITE	9315.6	2	500.0	-3	6.4	6.8	6.2	6.1	25	-2	-4	16804	1.38	
Brooklyn Union Gas (3)	366.5	5	55.9	20	15.3	13.4	9.5	15.2	8	8	1	601	3.07	
Eastern Enterprises	257.3	11	31.5	21	12.2	11.2	8.7	11.9	12	-2	10	652	2.41	
Enron	1711.5	-4	89.2	18	5.2	4.2	7.0	7.7	19	-3	-35	1986	2.28	
Enserch	784.1	-1	35.8	-9	4.6	5.0	NA	-0.4	NA	-10	NA	1298	NA	
Nicor	689.2	3	54.6	-3	7.9	8.4	8.6	17.1	9	-4	32	967	3.45	
Oneok (4)	242.0	5	28.5	15	11.8	10.8	NA	4.4	24	-4	-27	337	1.02	
Pacific Enterprises	1861.0	25	69.0	-1	3.7	4.7	7.8	11.9	12	9	-8	2611	3.41	
Panhandle Eastern †	333.6	-23	33.0	-69	9.9	24.8	NM	-30.8	NM	-14	NA	1284	-4.46	
Piedmont Natural Gas (2)	160.9	14	19.0	6	11.8	12.7	8.8	14.0	10	17	5	239	2.41	
Qwestar	203.4	5	28.2	5	13.9	13.9	5.2	5.7	24	10	-12	621	1.37	
Sonat	411.2	15	26.4	-21	6.4	6.9	5.5	7.2	18	-6	-18	1371	1.91	
Texas Eastern	1009.2	12	42.4	119	4.2	2.2	9.3	13.1	16	-2	3	2877	3.32	
Transco Energy	714.3	-18	23.8	104	3.3	1.3	NA	-6.3	NM	-5	NA	1190	-2.72	
Washington Gas Light	311.3	8	40.3	-4	13.0	14.6	7.9	11.0	11	7	2	492	2.35	
Wicor	260.2	-6	22.3	-6	8.6	8.6	11.4	14.3	13	9	3	278	1.64	

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A	A&P 10c	AAP 21b	Academy Laboratories 12d	Adia 9d	Advanced Micro 9d	Advo-System 21d	Affiliated Pubs 20b	Ahmanson 17c	Air Products 4	Airborne Freight 23c	Alaska Air Group 23a	Albany International 15d	Alberto-Culver 6d	Albertson's 10c	Alcoa 16a	Alexander & Baldwin 23d	Alexander's 8	Allegheny 17a	Allegheny International 6b	Allegheny Ludlum 16b	Allegheny Power 24a	Allied Products 15c	Allied-Signal 5	Alltel 22b	AM International 18c	Amstar 16a	Amstar 18b	Amstar 11b	American Brands 6e	American Building 21e	American Business 18a	American Cyanamid 4	American Electric 24a	American Express 17a	American Greetings 14d	American Home 12b	American Maize 10b	American Medical 12c	American National 17b	American Petrofina 11b	Amer. Savings Bank 17c	American Stores 10c	American TV 20a	Ameritech 22b	Ames Dept. 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IS THE MOMMY TRACK A BLESSING—OR A BETRAYAL?

Family, fairness, and feminism could be on the line, say readers of a BW Cover Story

You loved it. You hated it. It was BUSINESS WEEK's Mar. 20 cover story, "The mommy track"—a look at how business is accommodating corporate mothers with alternative work styles and flexible schedules. It discussed the conflicts over career, time, energy, and family involvement some fast-track women feel after children arrive on the scene and argued that companies can no longer afford to offer such employees the choice of all or nothing. And it suggested that restructuring work could be positive for women, for men, and for business.

BUSINESS WEEK's readers let fly—with phone calls, requests for more information, and a blizzard of mail. There were letters from corporate consultants, academics, women's groups, mothers, and fathers. No two people read the story in quite the same way. Some saw it as a prescription, others as a starting point. The responses were often intensely emotional, as well as extremely diverse.

Yet some common themes emerged. A number of writers strongly endorsed the mommy track. Many offered personal accounts. One American Telephone & Telegraph Co. middle manager, working part-time since the birth of her third child, eloquently expressed her sense of compromise, as well as hopes and doubts about her future career path.

After years of struggle and achievement that I'm very proud of, I have made my peace with the limitations my generation, my sex, and my family place on me in the context of corporate life. However, I spent many



years going to school, am highly motivated, and have a wealth of life and work experience—all of which should make me a very desirable employee.

Phyllis Sewell, a retired executive, offered a note of reassurance.

Fortunately, 26 years ago, my employer, Federated Department Stores Inc., was far-sighted enough to realize the advantages of a part-time executive and let me work three days a week while our son was young. My career was on a plateau for a few years, but in the decade following my return to full-time employment, I received three significant promotions.

Should such paths be institutionalized? One career counselor said no, fearing rigid "sidetracking." But attorneys at the National Women's Law Center in Washington said yes, in the interest of equity.



In the decade following my return to full-time employment, I received three significant promotions'

Far too many women have cause to fear their boss's response to a request for a schedule that accommodates their family needs, as do their male co-workers. One executive you quote says such arrangements should be restricted to high-quality employees. That attitude leaves employees vulnerable to the whims of their employer.

The uproar over the mommy track was set off by an article—which never used the controversial term—in the *Harvard Business Review*. Called *Managing Women and the New Facts of Life*, it was written by Felice N. Schwartz, president and founder of Catalyst Inc., a nonprofit organization that has long been an advocate for corporate women. Her views elicited this comment:

I agree with Felice Schwartz. Two-track tracking makes sense. If a married woman chooses to spend time raising a family and doesn't make it past middle management, tough cookie. No woman can have it all unless she is remarkably strong and very lucky.

But in an open letter to Schwartz, one woman responded:

There already is a doubtful standard. Your ideas will only promote the inequalities rather than alleviate them. It will pit women against women—those without children against mothers.

Do alternative tracks aimed largely at mothers threaten the accomplishments of the women's movement and betray women who have struggled to raise families at work alongside men and peers? That seems to depend on one's notion of feminism. Does feminism mean that all women should model their lives and careers after those

en? Or should traditional female values and norms reshape male-dominated institutions? Catherine M. Cooper, a vice-president at Fairfield Research Corp. in Connecticut, commented:

The mommy track is a natural extension of the feminist movement. The next logical step is to recognize that women have babies, and that this has to be accommodated. It gives women choices.

any respondents, however, objected to what they saw as the underlying assumption of the mommy track: that raising kids is primarily a woman's job. Here are three samples:

I find it ironic that the same women who set out to change corporate structures and to juggle career and family are not asking their husbands to take similar risks.

Women continue to climb corporate ladders without assuming family responsibility, another generation of children will ask: "Daddy, where were you when I was growing up?"

Let's consign the term "mommy track" to the sexist trash heap. Society needs to get over the idea that raising children is women's work alone.

A number of readers liked the concept, but objected to the term "mommy track." Several suggested language: "parent track" or "people track." One letter, from a Pennsylvania human resources consultant, went much further.

Label a need for flexibility in corporate careers "the mommy track" is to misrepresent the situation at the expense of women. Consider these examples: A spouse undergoes chemotherapy; a widowed parent moves in with a single person; a young employee writes a dissertation; an older employee needs a year off to fulfill an unrealized dream. Any of these gender-independent situations will lead a thoughtful human being to consider alternatives to the 50-hour to 60-hour work week for a limited period.

A few men have bucked convention for flexibility. Here's one:

My wife and I, both scientists in a corporate lab, have successfully kept our



Will 'another generation of children ask, "Daddy, where were you when I was growing up?"'

careers on track and cared for baby through a combination of day care, work at home, and flexible scheduling. This is in spite of our employer, who encouraged her to take leave and pressured me not to.

Among women interviewed for the Mar. 20 cover story, nearly all said their husbands rejected daddy tracks. For some it was economics. In many two-career families, fathers earn more than mothers.

Many women, though, hoped they would lead a workplace revolution, and that as mommy tracks became prevalent, other paths would follow.

Still, some readers say the mommy track is too much track and not enough mommy. Two examples:

The mommy track is great in theory but has little chance of success in the real world. Employers expect 100%, rightfully so. Our husbands and children deserve nothing less. The decision becomes, whose needs are most important? Family must come first.

You erroneously assumed that children are oblivious to the difference between part-time and full-time mothers. I realize how lucky I was

to have had a mother who temporarily set aside a career to fulfill her maternal obligations.

John K. Thornburgh, a Bell Telephone Co. of Pennsylvania executive, didn't like the "glamorization" of working mothers.

My wife, who chose to put a professional career on hold and stay home to raise our children, is no June Cleaver. She is a manager in her own right, instilling love and responsibility in tomorrow's generation.

For one reader, the idea of slowing down a career for a few years, then resuming, was no solution at all.

What makes Ms. Ehrlich think parenthood is a four-year to five-year undertaking? What parent of a school-age child doesn't deal daily with car pools, chicken pox, math tests, birthday parties, teachers' conferences, and psychic and physical hurt? Being a parent takes at least 18 years. Just try getting off the mommy track after 18 years.

Many readers pointed out that traditional notions make firms act against their own interest—costing them valuable employees. One San Francisco man took issue with the corporate obsession with rigid career ladders.

Firms that discriminate against child-bearing women are doing so on the basis of age rather than sex, because of an outmoded belief that promotable individuals should advance up the career path in chronological lock-step.

Women worried about losing precious years on the mommy track should be reminded that millions of men went through a similar experience a generation ago. We called it World War II.

By Elizabeth Ehrlich in New York and readers of BUSINESS WEEK



So the decision becomes, whose needs matter most?

ALAIN GOMEZ, FRANCE'S HIGH-TECH WARRIOR

Thomson's CEO zeros in on defense and consumer electronics. Should Japan be worried?

Jean-François Hénin was sitting in a barber's chair feeling "disgusted." He was so disheartened at corporate nationalizations by France's new Socialist government in 1982 that he had decided to "leave this rotten country and go work in the U.S." While he waited for his weekly trim, the finance expert

flipped through a magazine profile of a former paratrooper named Alain Gomez, who had just become chief executive of a national company. Two months later, Hénin started a new job as Thomson's treasurer. Says Hénin: "I knew this was a guy who was going to take risks."

Hénin figured right. In the seven

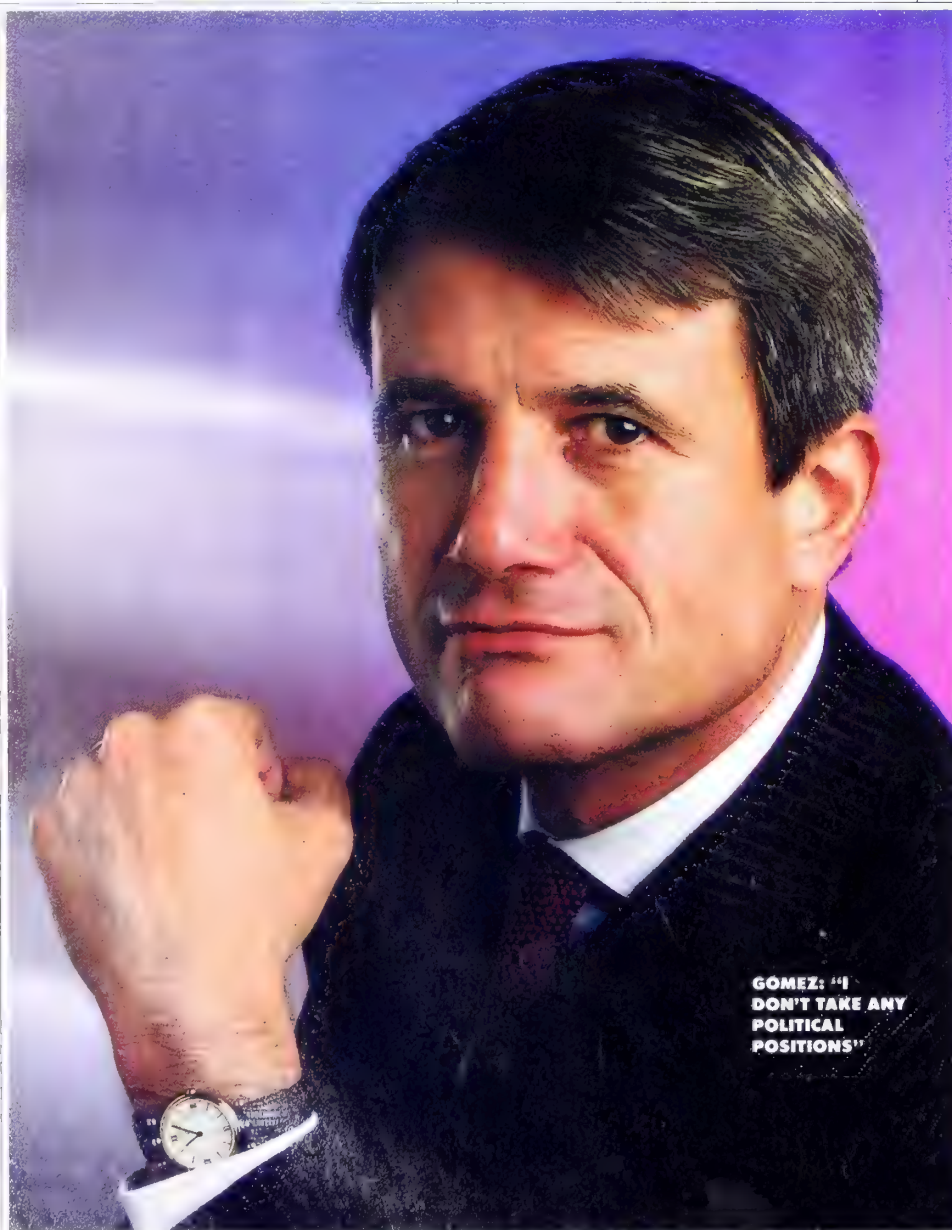
years since Alain Gomez, 50, became CEO of the huge state-controlled electronics group, he has emerged as one of Europe's most ambitious executives. Far from being the do-gooder that many feared President François Mitterrand might appoint, Gomez is one tough manager. He's an admirer and friend of John F. Welch Jr., the General Electric Co. chairman sometimes called "Neutron Jack" for his assertive management style. Gomez, whose tactics are similar, has aggressively restructured Thomson by hammering down costs and cutting jobs.

Now, Gomez is making his boldest move ever. Like Welch, Gomez only wants to be in businesses that he can dominate worldwide. He has zeroed in on two industries in which he thinks he can lead the pack: consumer and defense electronics.

FIREPOWER. Gomez is battling for the future of European high tech as much as he is for Thomson's prestige. He is convinced Europe can get back into the global high-tech race. One key: the move to a unified European market in 1992. Gomez believes a stronger home base and measure of trade protection will give companies like Thomson the firepower to fight back against Japan and the U.S. He's also counting on Europe Inc. to help fund high-cost research-and-development projects in high-definition television (HDTV) and computer chips.

Two years ago, he swapped \$80 million in cash, plus his medical electronics group, for Welch's GE/RCN TV operation in the U.S. (page 102). As head of a state company insulated from quarterly earnings pressures, Gomez figures he can keep up the heavy investment necessary in TV. The acquisition made Thomson No. 2 in the world in TVs after Dutch giant Philips. Now, Gomez is staring right at other electronics giants such as GE, Japan's Matsushita, and Germany's Siemens. So far, he's not blinking.

But he must move quickly. High-definition television is about to up-



GOMEZ: "I
DON'T TAKE ANY
POLITICAL
POSITIONS"

d the entire industry, and Gomez is rambling to amass the technology he needs to stay in the race against the Japanese. He's also investing millions in U.S. operations he bought from GE. Far, though, his U.S. TV operation isn't even in the black.

In defense electronics, Gomez is keen to line up European merger partners. With a shakeout coming in the fragmented industry, he wants to make Thomson the first pan-European defense contractor. That's a gamble, too, as Europe warms to Soviet peace overtures and defense budgets stagnate. Right now, Thomson is vying with such U.S. giants as Raytheon, Lockheed, and GE for the No. 2 spot in defense electronics behind GM Hughes Electronics Corp.

Overall, Gomez has worked a remarkable turnaround. Technically bankrupt when he took over, Thomson earned a profit of \$12 billion last year. Productivity is way up. Gomez laid off thousands in Europe, but total employment worldwide fell by only 1,000 jobs, to 104,000, after the GE/RCA purchase. Revenue per employee has shot up 60% during his tenure. Thomson CSF, the defense electronics company that accounts for half of its parent's sales, had 8.9% net margins last year, higher than any of its U.S. competition.

DISLINGING. "He's articulate, attractive, and very quick," says GE's Welch. But, however, has not saved Gomez from becoming a lightning rod for criticism in France. He has been a target of disliking throughout his tenure at Thomson, often by former executives dismissed with unnamed poison tongues in the government. It's partly his own fault. In a country whose elite has refined verbal finesse to an art, Gomez is sharp-tongued. Moreover, he has axed nonperforming operations—and executives—often without the usual face-saving excuses. "I didn't have to shake them [nonperformers] out of the trees," he once told *BUSINESS WEEK*. "Most of them are already senile and fell out on their own." Says one Thomson executive: "He's got a lot of enemies who would like to see him out."

They could get their wish in June, when the French government will consider the reappointments of the heads of state-controlled companies. Gomez has already nettled some top Socialists and government officials with his fierce independence. One clash could come over a much-discussed bailout of troubled fighter-plane maker Dassault, a major Thomson customer. If the government forces Gomez to take over the moribund company, it could suck dry Thomson's profits and jeopardize Gomez's credibility.

Rumors that President Mitterrand might veto him at the last minute have

gotten serious enough to depress the share price of Thomson CSF, the only unit of the company to trade on the stock market. With the Paris Bourse at an all-time high, CSF's shares are now trading at just eight times earnings, a 30% discount to the average. But even Gomez' enemies concede that the odds favor his staying on, which would make him the longest-serving CEO of a French state-owned company.

The fact that anyone is even talking about replacing Gomez is a measure of the passions he raises in France. A former radical leftist, he is now widely regarded as one of France's most ruthless capitalists.

His enormous drive has roots in his childhood. Gomez' anesthesiologist father, Francis, relentlessly pushed Alain to succeed, says one intimate. Gomez made his way through France's elite

schools. His father took the family to Algeria when Alain was 11, and Gomez earned the equivalent of a high school diploma at 16. Back in Paris, he did brilliantly in the prestigious Ecole Nationale d'Administration (ENA). He was chums with Jean-Pierre Chevènement, now France's Defense Minister, and together they formed a radical-left splinter wing of France's Socialist Party. He served in a paratroop corps near the end of the Algerian War.

LEARNING HARBALL. Gomez turned to business while the rest of his generation was embroiled in 1960s protest. In 1967, he married Francine Le Foyer, who as Francine Gomez became France's best-known woman executive as head of pen company Waterman. At least one Socialist pal accused Gomez of becoming an "enemy of his class" when he married her. He took a job with glassmaker Saint-Gobain.

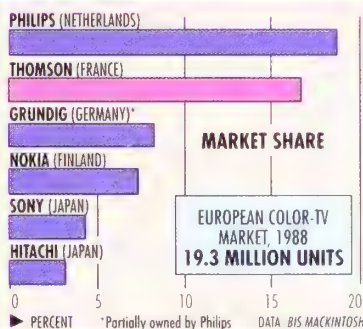
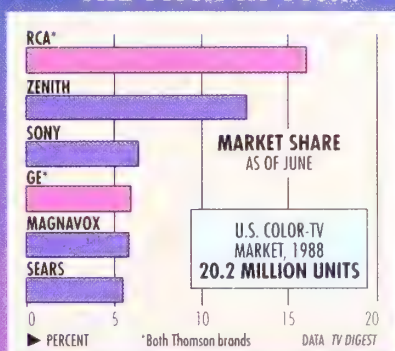
Gomez learned to play hardball at Saint-Gobain. "He reorganized Thomson according to the lessons he learned here," says Saint-Gobain Chairman Jean-Louis Beffa. Gomez made his mark restructuring the packaging division, merging factories, cutting personnel, and holding wages in line. Despite his leftism, one former colleague remembers him going out to a picket line to argue with strikers. "I'm not tough by nature," Gomez says now. "It's just that I've spent my whole career in operations that needed to be restructured."

Gomez hit Thomson like a bombshell. Says Christophe Cherblanc, an analyst in Paris: "Thomson was very old Establishment, and Gomez and the old Establishment are like two fists coming together." On his first day, Gomez sat in a colleague's office, puffing a big cigar and waiting until his own office was readied. "The others didn't want to meet him. They considered him an outsider," remembers one former Thomson official.

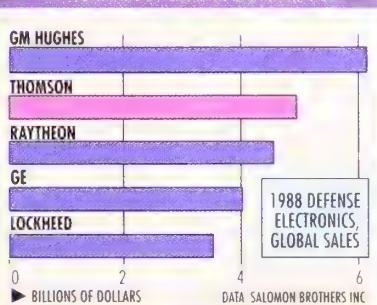
Gomez likes numbers and discipline in a country where many executives manage by instinct. He never takes a note but has a startling memory, frequently grilling subordinates with figures summoned up from meetings months earlier. If the numbers don't tell a good story, he'll go to the wall. If the trend is right, he delegates a lot of authority, but he still agitates. "With Gomez, when he's not mad, or at least irritated, we know something's wrong," says Alain Hagelauer, senior vice-president for finance. "When he's calm, we worry."

'OLD BARONS.' Thomson needed a good shaking. Born of a 1968 merger of CSF and Thomson Brandt, a consumer electronics company, the group had virtually no financial controls. An old-boy network of managers, known as the "Old Barons," built personal fiefdoms. "Thomson seemed to be out of control

THOMSON IS LEADING THE PACK IN TVs...



...AND IS EDGING HIGHER IN DEFENSE



when we arrived," remembers Noël Goutard, Gomez' former No. 2 man, now president of auto parts maker Valeo.

The first financial report Gomez received contained one page of figures, none in red ink. Yet when Thomson finally assembled enough information to get its 1981 annual report out in September, 1982, it showed a \$27.3 million loss. Shocked, Gomez reorganized Thomson's jumbled operations by line of business and instituted profit centers for the first

time. To get performance up, he de-indexed most salaries, 85% of which were tied to inflation. Jean-François Hénin took over management of Thomson's multibillion-dollar portfolio of advance payments on military contracts and started boosting returns. Still, losses for 1982 mounted to \$355 million.

Gomez started cutting, shucking off money-losers. Out went copper cable, light bulbs, and commercial refrigerators. Most important, Gomez managed

to cut loose a telecommunications unit that was losing \$100 million annually. In all, he ditched operations with combined sales of \$3 billion. By 1986, Thomson was in the black. Gomez' reward was to be among the few chiefs of state companies reconfirmed for a new three-year term by the conservative government of Prime Minister Jacques Chirac.

Since 1986, Thomson has been all Gomez. Divorced from Francine in 1982, he married Clémentine Gustin, a 35-year-old former journalist from a prominent French family who had been Thomson's public relations officer. Gomez dotes on their daughter, and the couple is expecting a second child in June. But family aside, he's all business. He's out of his apartment in Paris' posh 16th arrondissement by 8:15 a.m. and is rarely home before 8:30 p.m.

SECRET PLANS. Gomez seems to seek out challenges, and right now it's to become a world leader in TVs. No Western company of any size, other than Philips and Zenith Electronics Corp., is staying in that competitive game. While Japanese executives won't comment publicly, some privately disparage Thomson for its dependence on Asian technology, which supplies Thomson with its VCRs and other electronic products. But they do fear its political clout in Europe, especially as a force behind antidumping laws for consumer electronics.

When Gomez decided to go after GE/RCA's business, he kept the plans secret even from his top managers, says a former executive. Talks began in mid-1987 when Welch was in town for the French Open tennis tournament and the Paris Air Show. The deal was done in a few weeks. By January, 1988, Gomez was laying out his strategy to some 17,000 Thomson employees in the U.S. Asia, and Europe via satellite from a Paris concert hall. Huge profits will be reaped when consumers start replacing their current TVs with new high-definition models in the mid-1990s, he said, but only a few giant companies will survive until then. "This is our opportunity," he exhorted. "We cannot miss it."

Under Gomez, GE/RCA has made progress. It is introducing flashy new models to get rid of RCA's stodgy, walnut-console image and is refocusing selling efforts on big, service-oriented retail chains. Quality is up: Only 5% of the TVs coming off its main Bloomington (Ind.) line are defective vs. 17% in 1986. Thomson has even increased color TV prices after RCA spent years holding its market share with price cuts. So far, the changes are trimming losses without any major slippage in GE/RCA's leading 22.2% share of the U.S. TV market.

Gomez is trying to take back some of

A CASE OF CULTURE SHOCK ALONG THE WABASH

Patrick Samier memorizes 10 new English words a day. Michel Piatton keeps a French/English dictionary next to the phone. The transplanted Parisians, now living in Indianapolis, even spent a Monday evening last year watching the Colts trounce the Broncos.

But the French managers aren't letting the cultural dissonance get in the way of the big job at hand. They were

Research Center Labs, and the two groups are well-placed to win some U.S. funds to develop HDTV technology. Already, the partnership has developed an advanced TV system that is compatible with American broadcasting—something the Japanese have not yet been able to do.

Paris is putting its stamp on everything from product design to union contracts. This spring, Thomson switched to a direct-sales force in the U.S., dumping its distributor system. And it will probably spike RCA's high-end Dimensia brand and replace it with a line under the Thomson or Telefunken name.

Gomez wants GE/RCA to be more American than it ever was. In the past, it has bought VCRs, camcorders, and some TV tubes from Japan. This year, Gomez will spend \$54 million to modernize its six U.S. plants. It plans to expand its Marion (Ind.) tube plant to make 31- and 35-inch tubes, now entirely supplied by the Japanese.

The Thomson takeover hasn't been painless, however. Since 1987, its French owners have slashed 15% of the salaried work force at six TV plants in the U.S., Mexico, and Canada. Workers have agreed to forgo raises. Still, many employees see a rosier future with Thomson than with GE. Says senior scientist D. Joseph Donahue: "You would always rather be owned by Americans. But...you hate to work for a company that doesn't care about the business you're in." That certainly isn't the case with Thomson.

By Lois Therrien in Indianapolis



RAPT GROUP: WORKERS LISTEN TO A PEP TALK BY GOMEZ

dispatched when their boss, Alain Gomez, snapped up the GE/RCA television operations from General Electric Co. two years ago, hoping to become No. 1 in global consumer electronics. But their company, the French giant Thomson, has an uphill climb: High-definition TV is about to burst on the scene, and the Japanese are ahead. Chief Executive Officer Gomez is betting that the huge research and development and production facilities in Indiana will give Thomson a strong edge in the U.S. market.

Gomez is also hoping for help from Uncle Sam. Thomson has teamed up with NBC Inc. and the David Sarnoff

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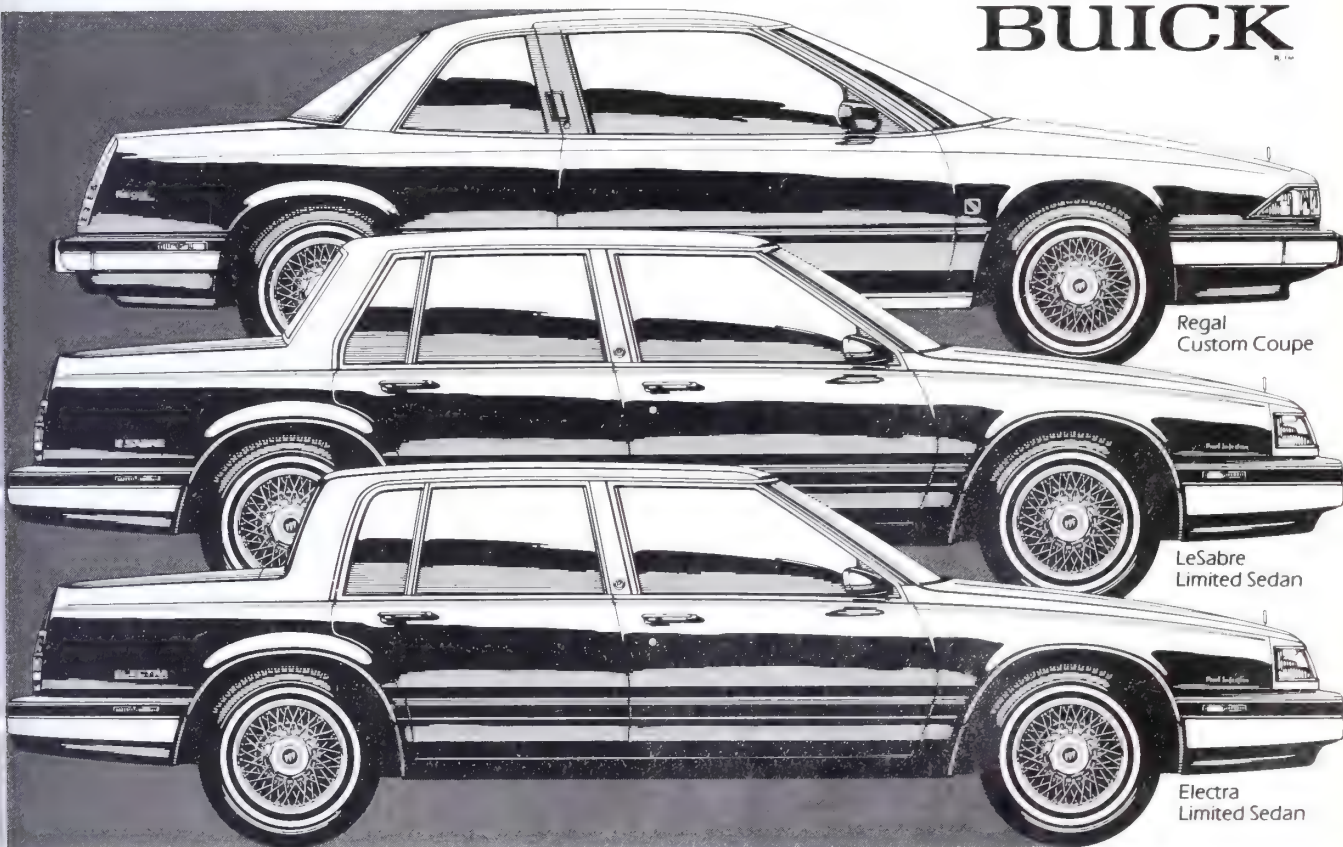
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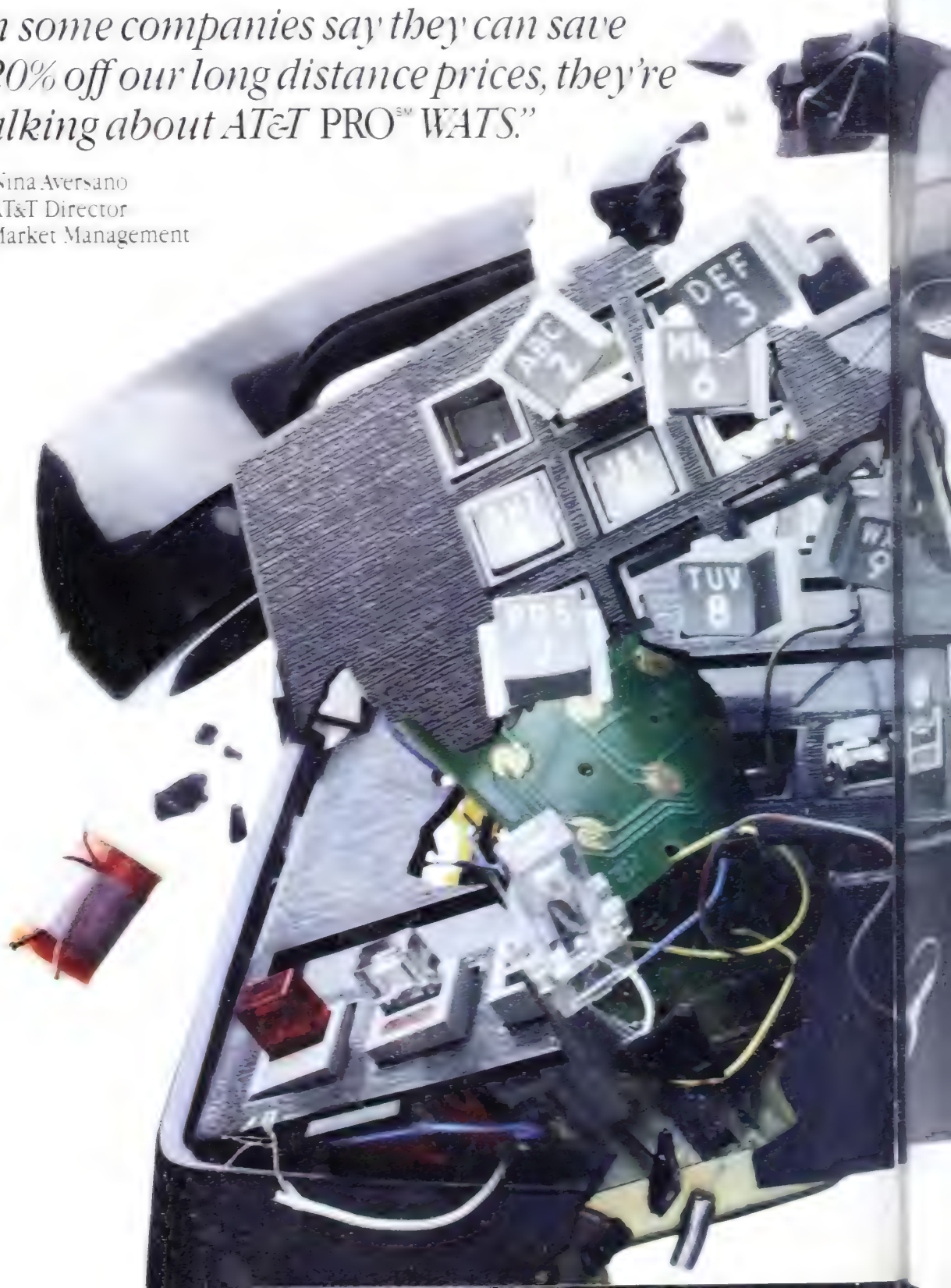


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AT&T Director
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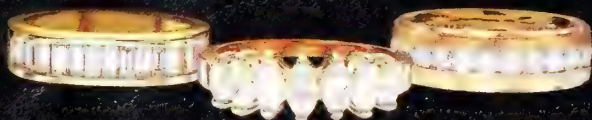


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the ground lost to the Japanese. For one, he's putting money into a Marietta (Ind.) plant to make his own TV tubes until now supplied entirely by the Japanese. In Europe, Thomson is starting to make VCRs without Japanese help. Gomez wants to start selling them in the U.S. in a year or two. The challenge is to have the technology in hand when high-definition TV hits.

In the meantime, Gomez has his hands full with Thomson CSF. A huge air defense contract with Saudi Arabia, which added an estimated \$1.1 billion to sales last year, is winding down. Thomson and U.S. partner GTE Corp. won a \$4.3 billion U.S. Army contract in 1985 to supply battlefield communications equipment. But even so, Gomez is budgeting for a sales decline of up to 20% by 1991.

UNION HOWLS. Gomez decided to fix CSF before it went broke. He took over the chairman's title at the unit after his reconfirmation in 1986. Breaking French precedent, he is now restructuring in a period of record profits. Despite howls from unions, he is cutting employment. He spun off a low-margin avionics division into a partnership. He even sold Thomson's stately Boulevard Hausmann headquarters and moved everyone into a drab low-rise on the edge of Paris.

The question now is whether Gomez can make it in the big leagues. So far, faster-moving executives in Britain and Germany have done a better job of capitalizing on Europe's changing defense electronics industry. Winners will be those companies that can gain ground by forging joint ventures as European defense budgets tighten. Not surprisingly, competition for partners is fierce.

Skeptics wonder if Gomez is pushing too hard. Workers are growing restive with his cost-cutting. A two-month strike at a Scranton (Pa.) TV-tube plant will keep the U.S. TV operation from breaking even this year. More strikes may be coming in Europe. "Thomson is risking a social explosion in the coming months," says an official of the Communist-led Confederation Générale du Travail.

Gomez isn't playing for the short term. Richard W. Miller, former GE/RCA chief, recalls that after the deal negotiations, he asked Gomez when he would know if he'd made the right move. Replied Gomez: "I'll know in 10 years."

Although Thomson has come a long way under Gomez, he still acts as if he's just getting started. Thomson has the size and look of a global powerhouse, but Gomez won't rest. "Nothing's proven, nothing's guaranteed," he says. In the risky game Gomez has chosen, the only thing that counts is staying power.

By Thane Peterson in Paris, with Louis Therrien in Indianapolis

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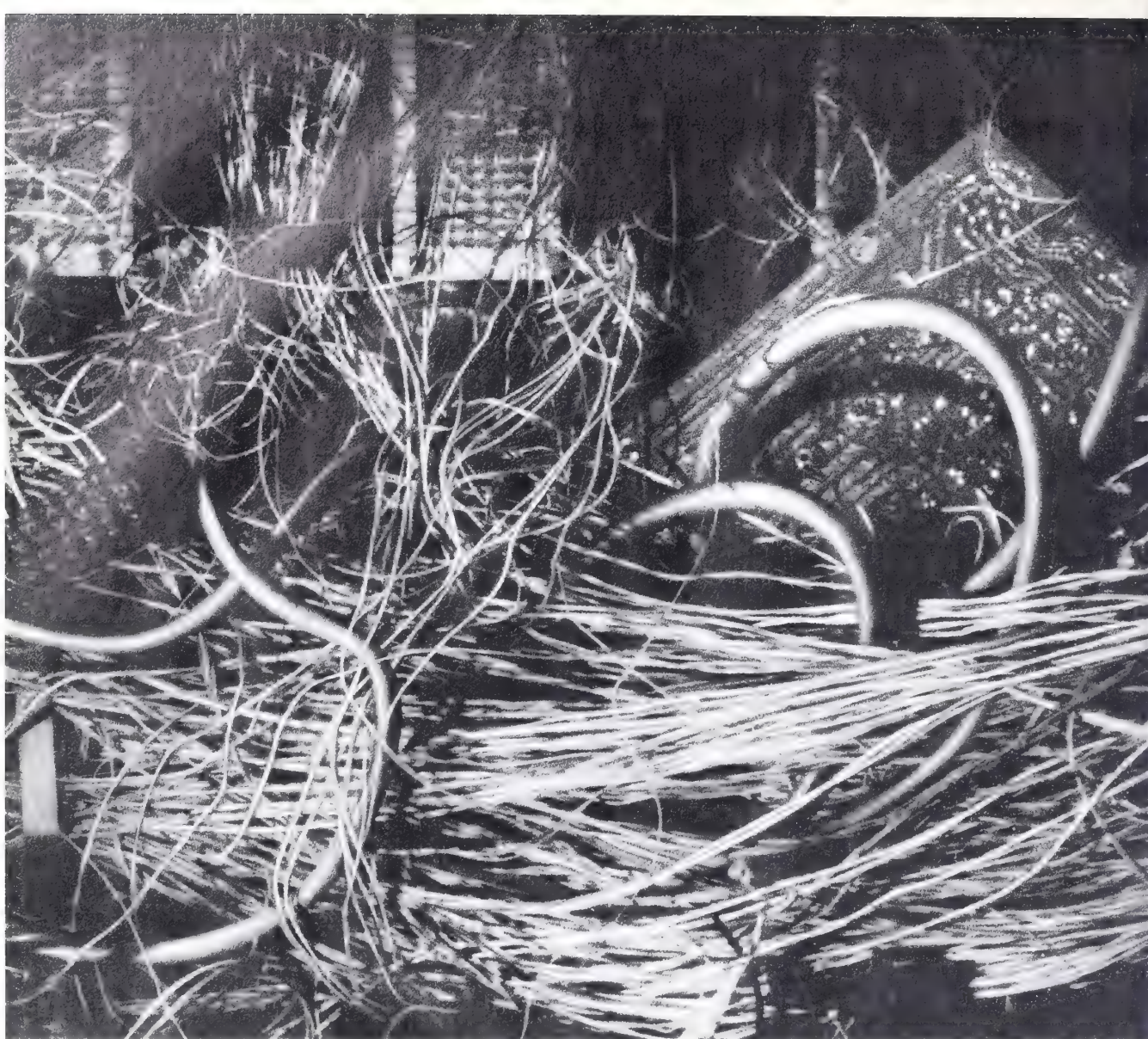
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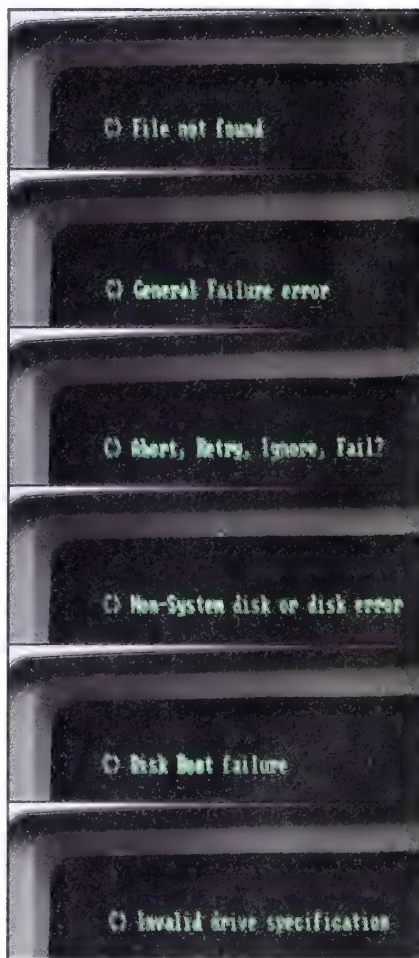
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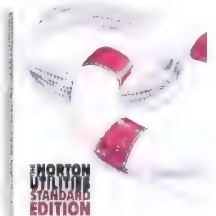
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"DO I TAKE RISKS? OF COURSE I DO," SAYS ROBERT CAMPEAU. "BUT THEY'RE RATIONAL AND WELL-THOUGHT-OUT"

CAMPEAU IS UP ON THAT HIGH WIRE AGAIN

All those department stores, all that debt—and now a radical refinancing plan

For more than three years, James T. Roddy translated the visions of Canadian real estate developer Robert Campeau into financing plans that lenders would buy. When Campeau needed \$11.3 billion to acquire two of America's largest department store chains, Roddy helped find a way. Bridge loans? Junk bonds? Interest-rate caps? No problem. But by the time he sat down with Campeau for a tense dinner meeting Apr. 24 in Toronto, the 46-year-old president and second-ranking executive at Campeau Corp. had reached the end of the line.

Roddy's message was blunt: No way could he sell investors on Campeau's pet project, a new form of 15-year mortgage financing with an unusual kicker. In exchange for extremely low repayments in the early years of the loans, Campeau would promise to give lenders a piece of the future sales growth in virtually all his retail properties. Unable

to change Campeau's mind, Roddy quit.

Campeau believes he can raise as much as \$3.6 billion from these new-wave mortgages. If he succeeds, he will be able to retire significant portions of the high-cost debt he assumed to pay for Allied Stores Corp. and Federated Department Stores Inc. More important, by reducing his debt expense for several years, Campeau would give his retail executives breathing room. They will need the time to boost sales growth at chronic laggards Federated and Allied—and to fund an aggressive \$250 million-a-year plan for store openings and remodelings. Federated owns such chains as Bloomingdale's, Abraham & Straus, and Burdines. Allied stores include The Bon, Jordan Marsh, and Stern's.

But Campeau might be playing with fire. His credibility is already low with debt holders who were burned when he weakened Allied by using its cash to

help buy Federated. And Roddy's unexpected resignation may make it more difficult to place the mortgages. Campeau also needs to keep the confidence of institutional real estate investors if he is to come close to his grandest dream: developing \$10 billion in properties over the next 15 years with Ohio shopping mall magnate Edward J. DeBartolo Sr. **NAGGING ISSUE.** That's the real reason Campeau went to the trouble of taking over Allied in 1986 and Federated a year ago. He's convinced his real estate experience puts him in a unique position to exploit the potential of his nine department store chains. Unfortunately for Campeau, the latest tumult again focuses attention on a nagging issue: Can the temperamental entrepreneur share control of his company with the steady hand of professional managers?

The debate with Roddy was more than a test of wills. Campeau's intricate ske-

debt could unravel if the mortgage stalls, retail sales plunge, and credit markets tighten. The immediate pressure is on Allied, the most leveraged of units. It must boost sales at least 4% stores open more than 12 months to avoid a cash squeeze that could ripple through Campeau's empire. Says one banker: "Campeau has shown he can put together a deal, but he still hasn't demonstrated he can keep it together." Campeau scoffs at such observations. "Do I take risks? Of course I do," he says. "But they're rational and well-

thought-out." That may be, but Roddy's resignation forced a reorganization that Campeau wasn't planning to pull out for some time. His hard created a holding company with the heads of the mail, grocery, and real estate units reporting to Campeau's new president, 36-year-old Ronald W. Tysoe. Tysoe has been with Campeau for eight years, longer in any other senior management and Campeau says Tysoe eventually will replace him as chief executive. With undergraduate and law degrees from the University of British Columbia, he joined Campeau Corp. as an executive assistant in the shopping center division. He was Campeau's chief strategist during the Allied and Federated takeover fights, and he oversaw more than \$6 billion in asset divestitures after the acquisitions. Colleagues say Campeau and Tysoe have a special bond, more like father and son.

With Roddy gone, Tysoe must make sure the mortgage financing is completed on time. There's little room for delay: Campeau Corp. needs a portion of the mortgage proceeds to pay back \$2 billion in bridge loans from the 1988 Federated takeover that will come due at January. He must also raise \$100 million at the parent-company level by October to tide Allied over during the pre-Christmas inventory bulge.

RED-NOSED. If all this sounds like a high-wire act without a net, that's exactly the way Campeau operates. The recently forced refinancing of Allied's short-term debt is a case in point. Campeau took about \$700 million in cash out of Allied to help pay for Federated. He did it by selling the cash generators he had hoped to keep, Allied specialties Brooks Brothers and Ann Taylor,

and by using the proceeds to buy Allied a 50% interest in Federated that pays no cash dividends.

Allied's junk-bond holders cried foul because the company's reduced cash flow raised the risk on their \$900 million in junior debt. Allied has never missed a payment, but last year its cash flow fell short of interest costs by \$25 million. That explains why those junk bonds are trading at a 38% discount and yielding 21.7%. Allied's banks did a better job of writing their protective covenants. When Campeau wanted to transfer the \$410

was loaned by the Reichmann family's Olympia & York Developments Ltd.

Repayments of those notes, as well as Allied's likely \$100 million cash call this fall, are to be funded by the sale of Canadian real estate assets. But property prices have softened considerably. Tysoe acknowledges there's no guarantee he can raise all the cash in time, but insists it's not a major worry. "We have a tremendous amount of flexibility."

TEETHING PAINS. Nor is Campeau worried about losing control of his company. The O&Y loan raised eyebrows, but the

Reichmanns still appear to be only passive investors. Campeau controls 56% of the voting stock. O&Y owns just under 25% if all debt securities are converted into stock.

With that many shares outside the public float, it's easy to see why Campeau Corp.'s stock price has been stuck in the mid-teens for months. The company's financial statements don't help. On Apr. 28, the parent company reported a loss of \$34 million on sales of \$8.7 billion for the year ended Jan. 31. Excluding onetime gains from asset sales, the loss would be a staggering \$525 million.

Campeau's concern is not reported earnings, however. It's having enough cash flow—earnings with noncash charges such as depreciation added back in—to keep the wolf from the door. Campeau predicts the department store divisions will generate \$1.15 billion in cash flow this year. His staff gives a more conservative estimate of \$1 billion, still plenty to pay the Federated-Allied interest tab of \$625 million.

But Allied and Federated are responsible for paying their own debts. Federated is stronger, so the pressure is on for New York-based retail Chief Executive John W.

Burden III and President James M. Zimmerman, who oversees operations from Cincinnati, to improve results at Allied. In Campeau's eyes, they can't do worse than previous managers. He says Allied's 1986 decision to purchase nine bankrupt Gimbels stores and convert them to Stern's was a \$200 million mistake. He claims Federated erred in pumping money into the floundering MainStreet, Children's Place, and Gold Circle divisions. Campeau says he recovered only half the \$200 million invested in MainStreet when he sold it. All three



PIANIST AT A
BURDINES STORE

CAMPEAU'S FINANCIAL BALANCING ACT

ALLIED 130 stores, \$1.83 billion long-term debt, \$4 million due this year. Last year's cash interest of \$221.3 million on debt exceeded operating cash flow by \$24.8 million. New \$1.2 billion working capital and receivables facility signed Apr. 7, expires in one year.

FEDERATED 130 stores, \$2.3 billion long-term debt, \$890 million due this year. Its \$800 million mortgage bridge is due by January. Campeau wants to repay \$400 million more with funds from new mortgage placement. Interest on debt was \$266 million, cash flow was \$391 million during 9 months of Campeau ownership in 1988.

RALPHS 137 stores, \$981 million long-term debt, \$184 million due this year. Sales hit \$2.38 billion last year for California grocery chain. After paying \$925 million to parent, interest expense jumped to \$125 million a year.

CAMPEAU CORP. Real estate and Canadian operations, \$1.33 billion long-term debt, \$239 million due this year. Cash interest of \$135 million just less than \$138 million cash flow. Will need to give Allied \$100 million later this year.

DATA: CAMPEAU CORP.

million from the sale of Ann Taylor to Federated, Japanese banks in Allied's loan syndicate just said no.

Campeau's team knew such a stalemate was likely. They quickly assembled a new Allied syndicate headed by Citibank and then obtained a \$1.2 billion line of credit on Apr. 7. But the new lenders took a hard-nosed stance: To get the one-year loan, Campeau Corp. was required to pump \$150 million into Allied. No spare cash was available, so the company had to borrow \$75 million from its own credit lines. The other \$75 million

Marketing

chains should have been sold years ago, he says.

But such bold moves never came easily at the old Federated, a loosely held group of retail chains famous for maintaining their autonomy. In the mid-1970s, competitors such as R. H. Macy & Co. were eliminating bargain basements in favor of fashion boutiques. It took most Federated units almost 10 years to follow suit. Attempts in the mid-1980s to centralize such functions as billing and inventory control stalled because division presidents couldn't agree on what computer systems to buy. Antiquated operations kept Federated's return on equity consistently lower than rivals.

Things are different now. Even

with them—up from the present 40%.

Once that decision was made, Campeau wasn't subtle about asking key suppliers for price reductions. Last spring he held meetings in New York to press his message. The push went over like a lead balloon on Seventh Avenue. "We're not cutting prices," says Bernard Chaus, chairman and CEO of Bernard Chaus Inc., which nevertheless expects to boost its women's clothing sales to Federated and Allied by at least 40%.

In addition to emphasizing select name-brand suppliers, Burden wants to increase private-label business from 9% of sales to 20% over the next three-and-a-half years. That would translate into annual sales of \$1.5 billion, more than

peau also appears to be years away. The landscape has not been dotted with new malls anchored by Allied and Federated stores. In fact, Zimmerman says he has already spiked three development proposals that didn't meet his standards.

NEW SAVVY. That's not to say the Campeau development team isn't playing hardball. Last year, Campeau tried to take control of the redevelopment of the Shoppers World mall in Framingham, Mass. His beef: The old Allied management cut a bad deal with mall developer Melvin Simon & Associates Inc., which was to receive a larger equity stake than Allied. Since there was no signed contract, Campeau insisted on better terms. Simon, which has sunk more than \$2 million into the project, has sued. A trial is scheduled for October.

Campeau also brings new savvy to negotiations with developers hoping to land his prestige stores as anchor tenants. He says that he demanded, and received, a 25% equity stake for no cash investment in exchange for a promise to put a Bloomingdale's store in a yet-to-be-announced San Francisco development planned by JMB Realty Corp. of Chicago. A similar JMB mixed-use center anchored by a Bloomingdale's store recently opened in Chicago. "It never occurred to the former Federated management to ask for an equity stake," Campeau says.

The venture with Edward J. DeBartolo Corp. is proceeding slowly. The partnership's only known project so far is planned mall in Jacksonville, Fla. "We're talking about a lot of deals," Campeau says. DeBartolo is playing his cards close to the vest. Richard S. Sokol, DeBartolo's senior vice-president of development, says there's no guarantee DeBartolo won't demand repayment of \$480 million used to acquire Federated when the loan is reviewed in 1991.

But a lot will happen before then. Tysoe must convince investors that the financing plans are sound. For now, at least, he won't have to worry about shepherding an initial public offering of the U.S. retail operation. Campeau has considered the option, but he's ruling it out until Wall Street is willing to pay what he thinks the company is worth.

That may be a while. In the meantime, Campeau's wife, Ilse, says she is anxious for her husband to slow his pace and spend more time at their house in Austria. But Campeau doesn't seem to be ready. At age 64, he says he feels 20 years younger. And he still loves the thrill of real estate development. It's good thing CEO-in-waiting Tysoe is on 36. Campeau still has a lot to prove before he lets him run the shop.

By Chuck Hawkins in Toronto and Stephen Phillips in Cincinnati



TYSOE, WITH FAMILY, MUST MAKE SURE THAT THE TAKEOVERS HE PLOTTED DON'T SOUR

though Burden and Zimmerman came up through the old Federated culture, the sweeping changes they imposed are a break from the past. The first move, consolidating back-office operations, cut 8,200 jobs and created teething problems. Until last month, the Cincinnati-based Lazarus department store chain was taking two weeks to deliver goods from a new warehouse to stores only miles away. But that was just a short-term glitch. Overall the company says it's saving more than \$330 million a year.

NO DEALS. The translation of mass-purchasing clout into demonstrable savings is taking longer. With nine store chains, Campeau has the potential to wield tremendous power. Federated and Allied had been buying goods from about 14,000 suppliers. Last year, officials decided to identify 400 key suppliers and concentrate as much as 70% of all orders

Liz Claiborne Inc., one of the largest designer manufacturers. Department stores like private-label goods because they eliminate middlemen, boosting profit margins to as much as double those of brand-name goods. But there's potential for problems if quality suffers or fashion trends are missed.

For long-term plans, Burden and Zimmerman speak frankly about the need for better salespeople. They want to attract them by paying commissions to all floor managers and sales staff. Although the change is now being implemented in all new stores, it will take several years to shift the existing 29,500 salespeople to commissions. And the change won't come cheap: It may cost as much as \$1 million per store for new training programs and bonuses.

The promised synergy between retail and real estate that first attracted Cam-



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GOT BIG DEALS, BIG PROBLEMS, BIG BUCKS? GET ARTHUR LIMAN

His skills are legendary—but defending Mike Milken could be his biggest challenge yet

In 1986, Dennis B. Levine temporarily captured a dubious title: biggest inside trader ever. Facing perhaps 20 years in jail for his crimes, the former Drexel Burnham Lambert Inc. investment banker wanted the best lawyer money could buy. He chose Arthur L. Liman. And he got his money's worth. Levine had to forfeit \$11.6 million in illegal profits and cough up a \$362,000 fine. But he spent just 17 months and five days in jail, and kept his Park Avenue apartment, all thanks to a deal Liman

98 counts of racketeering, securities fraud, and other crimes.

Another deal seems to make sense. If Milken goes to court and loses, he could be fined billions and spend years in jail. But the financier has vowed to fight, handing Liman a unique challenge. More renowned as a securities-law expert than as a criminal lawyer, he must nonetheless persuade jurors—who probably learned most of what they know about Wall Street from the movie of the same name—that the fabulously wealthy Mil-

ken and not do business with him.

Another Liman target is Milton Pollack, the federal judge handling a collection of civil suits against Milken. Pollack often throws the book at white-collar offenders, which is no reason alone to make him step down. So Liman is trying another tack. The judge's wife got \$8 million from a Drexel-managed leveraged buyout of her family's retail-store chain. Liman calls that a conflict of interest and has asked the U.S. Supreme Court to agree. Until the issue is

LIMAN'S FAMOUS CASES

Client	
CHRIS-CRAFT INDUSTRIES	1986
Liman persuades an appeals court to increase the \$10 million that Judge Milton Pollack orders Bancroft to pay Chris-Craft after a takeover fight with Piper Aircraft. The new sum is \$36 million. The U.S. Supreme Court reverses the decision.	
CARL C. ICAHN	1986
Liman represents the takeover artist when Phillips Petroleum sues Icahn to derail his \$8.1 billion takeover bid. Liman wins in court, but Phillips restrains and fends off the bid.	
PENNZOIL	1987
Liman negotiates a handshake deal for Pennzoil's purchase of Getty Oil, then sues Texaco for interfering with the contract. Liman's testimony helps persuade a Houston jury to award Pennzoil \$10.53 billion, later settled for \$3 billion.	
CBS	1988
Liman, friends with both William S. Paley and Laurence A. Tisch, helps them oust Thomas Wyman, CBS chairman.	

DATA BW



negotiated. "It's like going into surgery," Levine says. "You put your life in the hands of your attorney."

Now a mergers-and-acquisitions consultant, Levine is no longer big news on Wall Street. But his lawyer is. This past February, for example, Liman spent his days in federal court defending GAF Corp. against criminal stock manipulation charges. In the evenings he helped negotiate the \$18 billion marriage of Warner Communications Inc. and Time Inc. A week after GAF ended in a second mistrial, Liman's most talked-about client, Michael R. Milken, was indicted on

ken is merely a scapegoat maligned by ambitious prosecutors.

Already, Liman and his 10-lawyer team are laying the groundwork for this defense. While Milken concentrates on his favorite charities and makes anti-drug speeches, Liman excoriates everyone connected with the prosecution. First among them is the Securities & Exchange Commission, which he blames for pernicious leaks and for punishing his client before he's convicted: While Drexel is paying Milken's legal fees for now, the tentative settlement it struck with the SEC in April obligates it to fire

solved—as late as December, if the high court takes the case—Pollack can't approve the SEC settlement. And Drexel can't complete a separate plea bargain with prosecutors, which Liman is also opposing. The delay might discourage Drexel employees who otherwise could be subject to prosecution from testifying before the Milken grand jury.

Liman is even protecting Milken a bit from his biggest tormentor, the Racketeer-Influenced Corrupt Organizations Act (RICO). Its extraordinary powers allow prosecutors to seek a freeze on Milken's \$1.2 billion in compensation for

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Legal Affairs

four years, and his Drexel stock, before the trial. RICO is so tough that it's probably what prompted Drexel to settle. Liman has persuaded prosecutors to accept a \$700 million bond in lieu of cash, and he has won bail of \$1 million plus Milken's Encino (Calif.) home instead of the \$250 million prosecutors asked.

TRIVIAL PURSUITS. Liman's methodical and penetrating style will permeate his defense of Milken. Indeed, his involvement in the minutiae of cases is unusual even for a senior partner at the 375-lawyer firm of Paul Weiss Rifkind Wharton & Garrison. Before Milken goes to trial next spring, Liman and his underlings will comb through "millions and millions" of documents and review the 30,000 hours of tapes that pertain to former Drexel trader Bruce Lee Newberg (the third defendant is Milken's brother, Lowell). The goal is to prepare for Ivan F. Boesky, who won a light sentence after helping the government finger Milken and others. "I look forward to it," Liman says of his planned encounter with the ex-arbitrageur.

Liman's dogged preparation pays off. In the first GAF trial, he suspected that Boyd L. Jefferies, the prosecution's key witness, might have fabricated proof to support his story. Jefferies had already pleaded guilty to minor charges in return for his promise to help the government, but hadn't been sentenced yet. The lawyer asked Jefferies whether he had altered an invoice that was a key bit of government evidence. And the prosecutor had to admit that his own expert thought the document had been altered, though it wasn't clear by whom. Since Liman had been deprived of his right to see the government's report, the judge declared a mistrial.

At 56, Liman still thrives on his work—not to mention his \$450 hourly fee. But he considers himself more than a hired gun. So do many of his clients. Liman wrote to Levine when he was in jail and occasionally called Levine's wife, Laurie, to make sure she was holding up, says Levine. Warner Chairman Steven J. Ross and GAF CEO Samuel J. Heyman call him for business advice. Says Heyman: "What is extraordinarily unusual about Arthur... is the intensity of commitment to his client's cause."

Politicians court him, too. In 1972, Liman was drafted to help investigate the Attica prison riots. Three years later, he served as special counsel to the New York City bar committee that got Richard M. Nixon to resign his membership. And in 1987, he served as special counsel to the Senate select committee on Iran-*contra* as it investigated the activities of Lieutenant Colonel Oliver L. North. The shaggy New York Democrat might even

like to be Attorney General, if the Democrats ever regain the White House.

Liman, who graduated first in his 1959 Yale Law School class, was considered a catch even for Paul Weiss. Simon Rifkind, his mentor, recalls being impressed by his new hire's judgment and intensity. Liman's absentmindedness is legendary, but it hasn't mattered. He's considered the glue that binds the firm, says a lawyer. A traditionalist, he has three grown children and has been married for 29 years to an artist who "really good" landscapes and portraits line the walls of his corner office. "He's an uncomplicated person," says Rifkind, 87, and that carries over to his court-

Liman's encounter with star
prosecution witness
Ivan Boesky is sure to be
the hottest ticket in town

work. "He does what the case requires."

Milken's is a case in point. When Liman was hired in late 1986, he was supposed to play second fiddle to Edward Bennett Williams. "I would have been more than privileged to carry Ed's briefcase," he says. But last August, Williams died. That left Liman with a case he couldn't settle, and not just because Milken wouldn't. Boesky got three years in jail, and it would look bad, observe, say, if prosecutors offered less time to Milken, the bigger fish.

SIGNS OF DOUBT. Liman won't discuss strategy. Still, his past performance provides some clues. While painting Milken as hero of sorts, a provider of funds to needy businesses, Liman will delve into each detail of the government case, prospecting for signs of doubt that Milken broke confusing laws governing wheeler-dealing. He will probably argue, too, that Milken is getting picked on for Wall Street customs that aren't illegal. Fellow defense lawyers want him to go further—to attack prosecutors such as Rudolph W. Giuliani, the former U.S. Attorney for the Southern District of New York and now a likely candidate for mayor of New York, as being more interested in headlines than in justice.

Liman says he won't "bait" his adversaries. Still, minutes after Milken pleaded not guilty last April, his lawyer stood on the courthouse steps, blasting government leaks. It was a departure for Liman, and perhaps an instructive one. "I've been retained to try a case," he says. "That's what I intend to do."

By Michele Galen in New York

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ESOPs: ARE THEY GOOD FOR YOU?

THEY CAN DETER TAKEOVERS, SAVE TAXES, AND BOOST PRODUCTIVITY, BUT...

Two paragraphs here, a snippet of sound there, another press release crumpled in a wastebasket. Beyond the company cafeteria or the community newspaper, no single announcement of an employee stock-ownership plan (ESOP) gets much attention. But put them all together and it's clear that Corporate America is rushing headlong into something that was, only a few years ago, almost universally unthinkable in executive suites: giving up billions of dollars' worth of equity—and crucial margins of power—to their work forces.

Visionaries hail ESOPs as a miracle tonic that will reinvigorate a tiring economy, while cynics denigrate them as a desperation move by managers who would rather toss sops to their employees than succumb to a dreaded raider.

Some call them tax dodges, some call them socialistic, and some call them "people's capitalism." All can muster evidence, but the trend is still too new for anyone to be sure of more than this: Corporate America is entering a time of change that could take its place in history alongside the traumas of the takeover era, but with the po-

tential for a far more favorable impact on most employees.

Why have ESOPs suddenly become such a dynamic force among blue-chip companies? The answer is that they offer simultaneous solutions to major problems now besetting American corporations: When a company gives stock to its employees through an ESOP, it cuts its tax bill, erects a takeover defense, clamps a lid on the cost of pensions, and perhaps even spares itself the nightmare of monumental medical benefits for future retirees. And it can do all this while moving toward the most important goal of all: boosting productivity enough to make U.S. companies more competitive in world markets.

The ESOP is fast becoming a way of life at many of the nation's best-known companies, including Anheuser-Busch, Lockheed, Procter & Gamble, and Polaroid. An estimated 200 public companies

BIG-LEAGUE ESOPs

Company	ESOP stake Millions of dollars
AVIS	\$1,750
HEALTHTRUST	1,700
PROCTER & GAMBLE	1,000
EPIC HEALTHCARE	856
J.C. PENNEY	700
ANHEUSER-BUSCH	500
TEXACO	500
U.S. WEST	500
POLAROID	300

DATA: NATIONAL CENTER FOR EMPLOYEE OWNERSHIP

ze set up ESOPs during the past two
rs alone. Overnight, employees typi-
ly become their company's single big-
t shareholder bloc. Says Malon Wil-
s, president of American Capital
ategies Ltd: "I think this will be as
as the leveraged buyout boom."

For most big companies, an ESOP has

thing in common with
LBO: more debt and
her leverage. But the
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Joseph R. Blasi calls
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PLANS. Will they? At
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beyond that for
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ployee-involve-
ment programs
connected to

employee ownership," says Blasi, author
of *Employee Ownership: Revolution or
Ripoff?* (a title adapted, with permission,
from BUSINESS WEEK's 1985 cover story
on ESOPs). "They think if they sprinkle a
little stock around, they'll get participa-
tion and better productivity."

Other critics say the costs to the com-

pany are too high. In acquiring stock for
its ESOP, a public company often in-
creases its debt burden. If, instead, it
simply uses stock already in its trea-
sury, it dilutes the value of the outstand-
ing shares. And since the ESOP repre-
sents part—or even all—of the retire-
ment package, some feel it's wrong to

concentrate employees' re-
irement eggs so heavily in
the company's stock. These
issues are sharpening the
argument about whether
the nation should go on
subsidizing the fast-grow-
ing legion of ESOPs if they
fail to produce enough new
wealth to offset the loss in
taxes.

Their impact on produc-
tivity is the key to that de-
cision. Since 1973, annual
labor productivity for the
U.S. as a whole grew at a
mere 1% rate, compared
with a 2.7% annual pace
for the previous 15 years.
The evidence indicates that
ESOPs could help reverse
that trend. At Brunswick
Corp., for instance, sales
per employee have jumped
nearly 50%—to \$115,000 in
1988—since it set up an
ESOP in 1983. Says William
R. McManaman, Bruns-
wick's vice-president for fi-
nance: "The ESOP has im-
proved the morale of our
employees by creating a
sense of ownership and
has had a definite impact
on productivity."

LATEST STEP. But it doesn't
take a rocket scientist to
figure out that the current
wave of ESOPs is occurring
mainly because it saves
money in the short run,
even if productivity doesn't
go up. It's the latest step
in Corporate America's
move to replace fixed com-
pensation costs with vari-
able wages and benefits,
which give companies
more flexibility in respond-
ing to a changing econo-
my. An ESOP is

A GUIDE TO THE ESOP REVOLUTION

An employee stock-ownership plan is a benefit favored by Congress on grounds that it strengthens workers' stakes in the free-enterprise system. Typically, a public company borrows money to buy its own stock from its treasury or on the market and places the shares in its ESOP. As the loan is paid down, a trustee allocates stock to individual employees.

COMPANIES ARE EMBRACING ESOPs...

TAX BREAKS They get a triple tax deduction—not just for the interest on their ESOP-funding debt, but also for the dividends they pay on the ESOP-held shares and, indirectly, for the principal they repay.

RESTRUCTURING PLUSES The more stock its ESOP holds, the better equipped a company is to fend off a raider. ESOPs are also a help in leveraged buyouts, recapitalizations, and spinoffs of units.

PENSION PARING An ESOP is a form of defined-contribution pension plan. When a company uses an ESOP to reduce or even replace benefits, it can save heavily, especially when it contributes its stock instead of cash. Some companies drop post-employment medical insurance, telling retirees they can dip into their ESOP account to buy coverage.

PRODUCTIVITY POTENTIAL Once employees are owners as well as workers, executives can look for higher morale and better quality.

...BUT THEY POSE FRESH UNCERTAINTIES

PRODUCTIVITY GAINS They're not preordained. Studies show that ESOPs help little here unless executives are willing to give workers a strong and genuine role in running things.

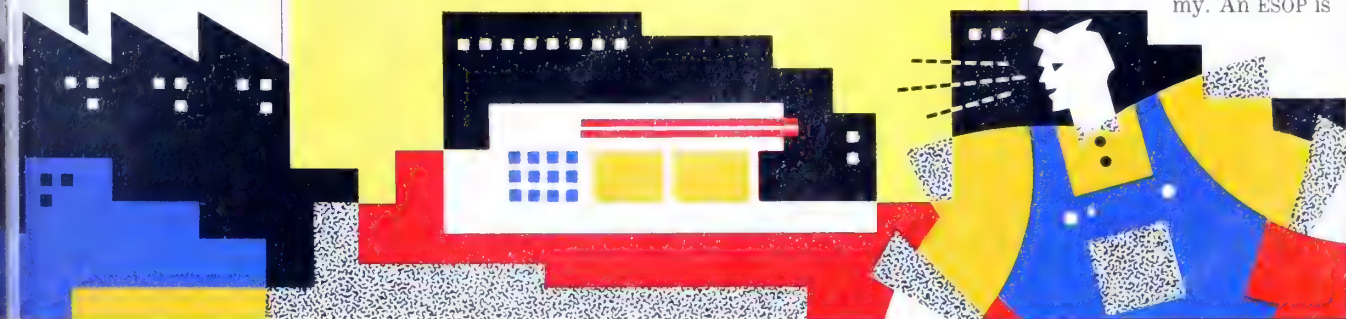
THE BALANCE OF POWER It shifts suddenly as the ESOP transforms workers into a large bloc of shareholders who are intimately knowledgeable about the company. If incumbent managers of a public company alienate the employee-owners, workers just might vote their shares to throw the rascals out in favor of a raider.

THE LAW The Labor Dept. and the courts are on the lookout for abuses of ESOPs. If they perceive a hastily erected ESOP as a blatant attempt at entrenching management, they'll reject that defense.

RETIREMENT INCOME The more of it that comes from the ESOP, the more dependent a pensioner is on the price of the company's stock. That leaves future retirees vulnerable to Wall Street whims as well as to management mistakes.

CONGRESS The lawmakers could change the rules of the game at any time, particularly if abuses abound and budget pressures intensify.

DATA: BW



Cover Story

"the lowest-cost alternative" to funding the company's traditional contributions of stock to a profit-sharing plan, says Lawrence M. Call, treasurer of PPG Industries Inc. The glass and chemical maker expects its ESOP to cut the plan's costs by 30% over a few years.

Those savings depend mightily on the special tax advantages Congress has bestowed on ESOPs. In 1974, the people's capitalism movement that Louis O. Kelso founded gave Senator Russell Long (D-La.) a way to promote employee ownership. Since then, more than 20 pieces of legislation have increased the tax appeal of ESOPs. And these tax advantages have grown increasingly important in a world where so many other breaks have been eliminated by the 1986 Tax Reform Act.

Most large companies borrow to fund their ESOPs, which are set up as a trust under federal pension law. These trusts then use the borrowed money to purchase the stock, which is gradually allocated to each employee as the loan is paid down out of the corporation's cash flow. By buying the shares on the open market, a company avoids earnings-per-share dilution. Often, the stock goes into the employees' 401(k) accounts. They receive their stock when they retire or quit.

GOOD DEAL. A corporation gets more tax breaks from an ESOP than from any other kind of pension plan. The borrowed money is cheap because lenders get taxed on only 50% of the income they get on the ESOP loan. This enables lenders to charge rates that are some 1.5 percentage points below a company's normal borrowing cost. Companies also get the normal deduction for interest payments on the debt. And that's not all. They can deduct their principal payments because the outlay is treated as a normal cost of maintaining a retirement

plan. In what may be the most remarkable tax break of all for a public company, double taxation of dividends goes out the window. Companies are allowed to deduct the dividend payments on the stock held by an ESOP.

The dividend deduction is proving especially appealing. Many companies are creating generous convertible preferred stock for their ESOPs. Federal-Mogul Corp.'s ESOP preferred, for example, pays a guaranteed dividend yield of

seeking new tax-sheltered investments now that the municipal bond market has shrunk by half since the 1986 tax reform. Insurance companies are active, too, through the private-placement market. Today's issuer of ESOP debt has better credit quality than a normal company in the private-placement market.

The only hesitant lenders to ESOPs seem, are those companies that have much tax-advantaged debt that they cannot use any more to shelter other

come. Prudential Insurance Co. has lent about \$1.5 billion to ESOPs so far in 1989. Now, with its thirst for tax-sheltered debt slaked, it's pulling back, as is John Hancock Mutual Life Insurance Co., another big private-placement customer.

BENEFIT HIT. But this is bringing an innovation in public-market offerings to ESOP sponsors, including Brunswick and Unisys Corp. A public market in ESOP debt would offer issuers a broader investor base while making it easier for lenders to buy and sell their loans. The public market will grow slowly, however, since the

50% income exclusion applies only to those on Congress' list of "qualified" institutional lenders. Insurance companies and commercial banks qualify, but investment banks don't.

An ESOP can help meet several company cost-control objectives. In exchange for their 22% equity stake, Polaroid Corp.'s workers took a 5% pay cut and gave up the company's 50% matching contribution to their 401(k) savings plan. Post-retirement medical benefits can take a hit, too. Most large companies offer their employees some form of retirement medical insurance, paying the medical bills as they come in. The typical lifetime per-retiree cost to the employer, according to Salomon Brothers Inc., is about \$15,000 to \$25,000—and estimates of aggregate corporate liability range



7.5%, compared with a 3.6% yield on its common stock. And remember, those steep dividend payments are deductible. Finally, by funding its leveraged ESOP today, a company can cut its future benefit costs if the stock appreciates. PPG bought shares for its ESOP at 42½, and its stock now trades at 45.

Lenders have been eager to accommodate their ESOP borrowers. The ESOP loan business has grown from \$1.2 billion in 1986 to an annualized \$18 billion pace this year. Corey Rosen, director of the National Center for Employee Ownership in Oakland, Calif., estimates that public-company ESOP borrowings so far in 1989 exceed their total ESOP borrowings over the past 15 years (chart).

Profitable regional banks are among the big buyers of ESOP loans. They are

AS MORE ESOPs ARE BORN...



...THEY TOUCH MORE LIVES...



...AND FUEL BORROWING



DATA: NATIONAL CENTER FOR EMPLOYEE OWNERSHIP, BW

om \$100 billion to \$2 trillion. Whatever the true cost, the Financial Accounting Standards Board proposes that companies disclose their future liability starting in 1991.

STAKES. Whitman, Ralston Purina, and Boise Cascade have decided to phase out their post-retirement medical benefits. Instead, the companies tell employees they can tap their ESOP money at retirement to pay their medical insurance premiums (or, if they choose, they can take the money and fly off to Europe). To help employees defray the future expense, Ralston boosted its match-

contribution from 50¢ on the dollar (up to 6% of salary) to \$1 on the dollar. Says Salomon Vice-President Jenny Furman: "Using an ESOP to fund post-retirement medical benefits is probably the most sensitive topic among companies right now."

All this sharply escalates the stake employees have in the success of their companies. No longer can they simply rely on their employers for a predictable retirement income. Now, the quality of their later years will depend heavily on their company's stock performance. Says Whitman Corp. Chief Financial Officer John P. Fagan: "We hope [our employees] come out ahead economically, but it all depends on how the stock value appreciates."

The difference between a top stock performer and a laggard is striking. Take a company that contributes ESOP stock equal to 5% of pay annually for an employee starting at \$40,000-a-year job who is 5% yearly raises until retiring at age 65. After 30 years of service, if the ESOP stock pays dividend and price gains of 4% a year, the retirement payout is \$26,319 annually. That's below the market's historic appreciation, which is 8% a year. If an ESOP stock's annual return is 12%, the employee's pension is \$89,377—more than three times more than the lackluster stock. The bottom line isn't absolute: The law does give employees the option to swap half of the company stock for other investments starting at age 55. Still, a hefty chunk of the retirement package can hinge on what happens to a single stock.

That's why ESOPs rip off the employee if they are used solely as a takeover defense by entrenched management: Companies insulated from market forces often perform poorly. Business became easier because of the defensive power of ESOPs

only this year, when Polaroid beat back a raid by Shamrock Holdings PLC, the acquisition company run by Roy E. Disney and Stanley P. Gold, largely by instituting its ESOP. Polaroid is among the 50% of all publicly owned companies that are incorporated in Delaware, where the law prevents a hostile acquirer from merging with a target company for at least three years unless the bidder wins 85% of the stock. Polaroid didn't take any chances—it raised its ESOP's stake to 22%. Lockheed Corp. and Dunkin' Donuts Inc. have also set up hefty new ESOPs to help ward off potential raiders.

WHAT EMPLOYEES SHOULD LOOK FOR IN AN ESOP

INFORMATION The employer should provide education about the ESOP concept, the rules governing its ESOP, and how it will affect overall compensation. Workers should receive reports on sales, profits, productivity, stock price, and how the company is performing against its competitors.

PARTICIPATION As owners, workers should have the ability to influence decisions and recommend improvements in quality and in the way work is organized, especially in their immediate area. Employees should be represented on the board if the ESOP owns a significant block of stock, although this is not required by law.

VOTING RIGHTS Employees in a privately held company should have the same right to vote their ESOP stock as other shareholders. That includes the right to vote for directors, even when not required by state law. In publicly held companies, workers should be able to vote confidentially on tender offers, and ESOP shares not yet allocated to individuals should be voted in the same proportion by the trustee.

DATA: BW



There's "no doubt" that an ESOP is a takeover deterrent, says Whitman's Fagan. But no takeover defense is bulletproof. The Labor Dept., which oversees pension plans, is warning ESOP trustees (usually appointed by management) that the interests of management and its employee-owners may not always be the same. The department says that trustees could be abdicating their fiduciary responsibility when they vote unallocated ESOP shares in the same proportion that employees vote those they already hold. Labor's reasoning is that trustees can't possibly know how future employees

would vote these shares when allocated to them. That argument doesn't wash with ESOP advocates. "It's outrageous to say the trustee is a better judge of the wishes of future employees than are the current workers themselves," says ESOP partisan Rosen.

While the trustee-voting issue remains unresolved, the use of ESOPs as a defense mechanism must clear other barriers in Delaware. Since employees must be able to vote their shares confidentially for a company to use the "Delaware defense," disgruntled workers can safely vote in favor of a raider. After all, says Robert Rice, a partner at Milbank, Tweed, Hadley & McCloy: "Employees like to feel that they will have a say in whether the company gets sold or not."

The future of ESOPs, however, will not be resolved in the courts or in the financial arena. The test of whether people's capitalism is a bane or a blessing lies elsewhere—in productivity growth. "Employee ownership alone is not sufficient," says Charles Nichols, senior vice-president at Science Applications International Corp. "You can hardly tell employees that they're going to be owners and then not let them come in and talk to you." It all depends on management's willingness to actively involve its new owner-workers in decision-making.

OWNERS' STRIKE. This aspect of ownership wasn't uppermost in Louis Kelso's mind when he invented the ESOP concept in the 1950s. In no case did the 1970s legislation cite productivity as a reason for granting tax subsidies to ESOPs. The participation issue rarely arose before the 1980s. ESOPs thrived only in small, privately held, nonunion companies, where the interests of managers and workers usually dovetailed. An exception was

South Bend Lathe Inc., which adopted an ESOP in 1975 and then was hit with a strike by worker-owners, in part because they had no voice in the 100% employee-owned company. But Kelso's investment banking firm, Kelso & Co., which dominated the leveraged ESOP trend until the mid-1980s, didn't emphasize employee involvement in the deals it arranged. Louis Kelso wasn't against worker participation. He simply felt that demanding full voting rights and a voice in shop-floor decision-making for worker-owners would turn companies away from ESOPs.

But as ESOPs spread to larger, union-

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by Allen E. Paulson

**Chairman and Chief Executive Officer
Gulfstream Aerospace Corporation**

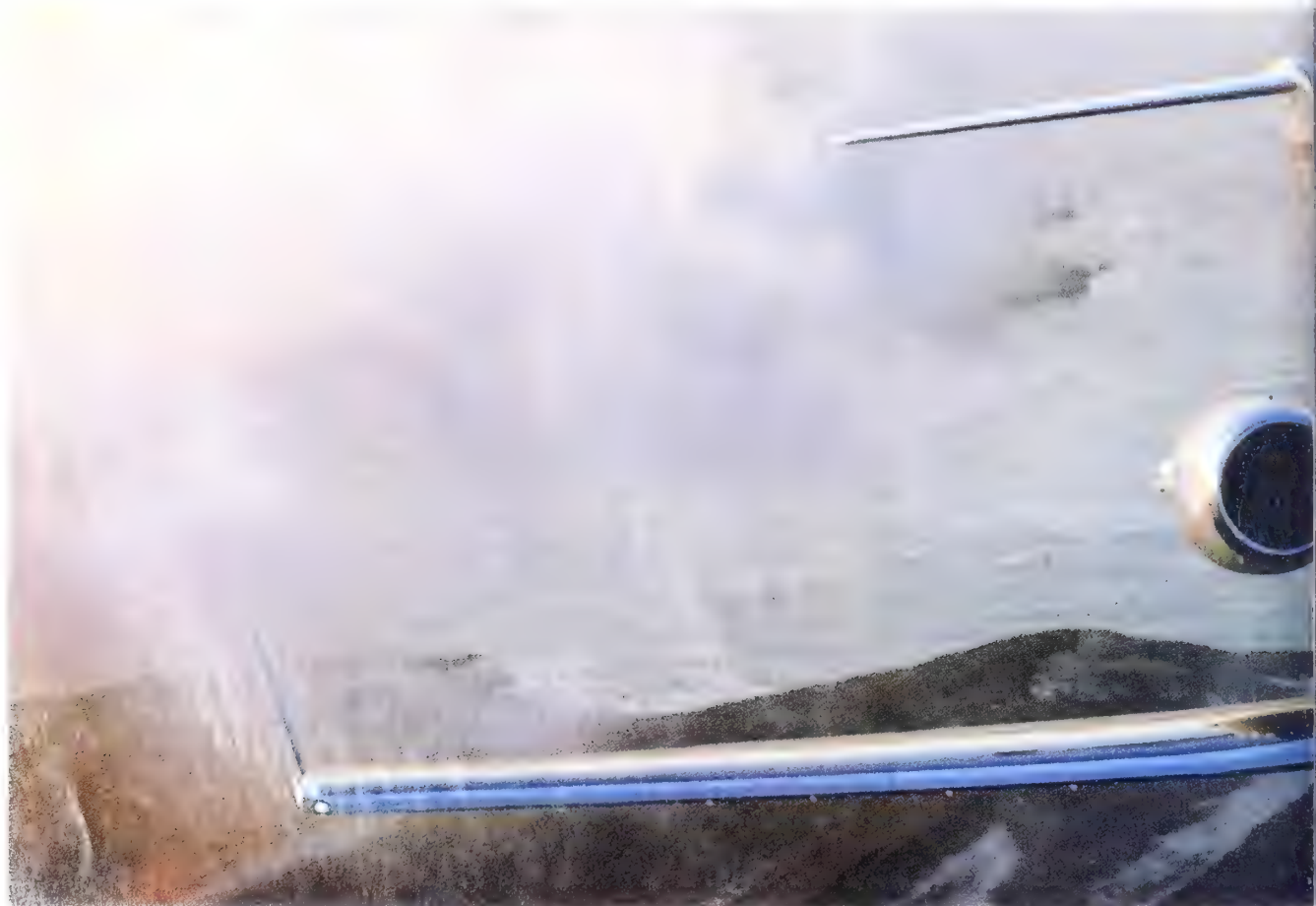
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ized companies, the participation issue gradually became more important. Unions such as the United Steelworkers demanded full voting rights and board seats for its members where an ESOP owned a significant share of the company. And important participatory models began to emerge in the mid-1980s. One was Weirton Steel Co., a 100% employee-owned company with extensive involvement programs. It has performed better than most other steel companies since its ESOP conversion in 1983.

PROOF POSITIVE. Meanwhile, non-ESOP companies began to learn how to improve productivity and quality through shop-floor problem-solving teams, labor-management committees, and self-managing work teams. And a few studies have produced strong evidence that employee-owned companies perform best when employees are involved. One, a 1986 report on ESOPs by the General Accounting Office, found that productivity in companies with worker involvement grew 52% faster than in nonparticipatory companies.

Despite this evidence, the majority of companies with ESOPs have yet to provide much opportunity for employees to

participate. Many managers simply don't want to share power or shake up the company by ordering supervisors to listen to workers. The same is true in most non-ESOP companies. But employee-owned companies have a special incentive to give workers a voice in decision-making, says Blasi. "In a time of deadly competition, a highly educated work

'We hope [our employees] come out ahead economically, but it all depends on how our stock value appreciates'

force, and a tight labor market, labor-management cooperation should be an economic necessity for many companies," he says. While he's an ESOP advocate, Blasi concludes: "The government should not spend a lot of money on ESOPs unless it gets labor-management cooperation in return. Period."

Other ESOP enthusiasts take the opposite view. "Worker participation is a

great idea but has nothing to do with ESOPs," says Jeffrey R. Gates, a lawyer with Kelso & Co. and a former staff aide to Senator Long. "It's ludicrous at best and dangerous at worst to legislate that ESOPs require worker participation." But there is much sentiment on Capitol Hill to amend ESOP laws.

But there are some signs that participation is spreading in the latest ESOP boom. While most of the nonunion companies that recently converted to employee ownership have had little significant worker involvement in the past, some are at least exploring the idea. Among these are Epic Healthcare Group Inc., formed last year in an \$856 million ESOP leveraged buyout; Wyatt Cafeterias, a Dallas-based company that operates 120 eateries; and HealthTrust Inc., which runs nearly 200 hospitals and other health facilities spun off by Hospital Corp. of America in 1987.

These efforts are embryonic compared with employee involvement at non-ESOP companies such as General Motors, Ford Motor, and TRW, where change has been under way for years. But a few of the recent ESOP converts have substantial programs. Austin Industries, a Dallas

WITH ITS ESOP, AVIS TRIES EVEN HARDER

For Avis Chairman Joseph V. Vittoria, running a company that is 100% employee-owned "is easier, and it's harder." Vittoria reported to four different owners in four years—and educated each of them about the car-rental business. Now he works for Avis' 12,700 current shareholders, who are mostly in for the long haul. And unlike the old owners, the new ones know the business well enough to tell Vittoria how to improve it.

Indeed, Vittoria spends three or four days each month visiting Avis Inc. offices around the country, briefing employees on business developments and answering their questions. This roadwork is part of a thoroughgoing cultural overhaul that started in September, 1987, when Avis set up an ESOP and bought the company from Wesray Capital Corp. for \$1.75 billion. Since then, Vittoria has put in place an elaborate system that gives Avis workers a significant

say in how the company is managed.

At the heart of the system are EPGs, or employee participation groups, with representatives of each class of line worker, from mechanics to rental agents. Set up in each city where Avis has an office, the EPGs meet once a month. Employees are encouraged to suggest ways of improving customer service and running the business more efficiently. "The suggestions don't just lie there. They're actually worked on," says Herman Jones, 56, a 19-year Avis veteran who drives a bus at John F. Kennedy International Airport.

LOCAL LAWS. An employee in Reno, Nev., for example, suggested setting aside cars for nonsmokers. Another thought renters might appreciate tips on local traffic laws. These ideas went out on Avis' computer network and are in use throughout the company.

EPG representatives also meet at the zone and district levels to monitor the

process and filter ideas up through the system. A national meeting of EPG members with Vittoria and other managers is held annually in the company headquarters in Garden City, N.Y. It's a company that is largely nonunion (most of its 2,800 unionized workers belong to the Teamsters), Avis employees thus have an unusual ability to influence management decisions. And the company seems to be doing quite well as a result.

So far, Avis has paid off \$90 million of its \$395 million in buyout debt—\$8 million ahead of schedule. Service complaints in the 12 months ended Aug. 3, 1988, were down 35% from the year earlier period, the company says. And Avis stock was worth \$15.22 per share at the beginning of 1989, up from \$5.30 at the time of the buyout, according to an independent valuation.

Since 1984, Avis has recorded higher profit-sales ratios than car-rental leader Hertz Corp. and now aims to overtake Hertz in market share. That could be awkward for a company whose ad have long made a virtue of its second-place status. What happens if it becomes No. 1? "Well," says Vittoria, "we probably won't say a word."

By Harris Collingwood in New York

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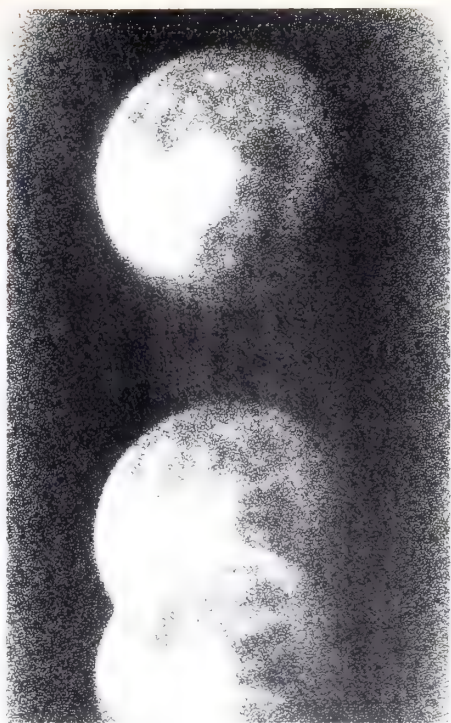




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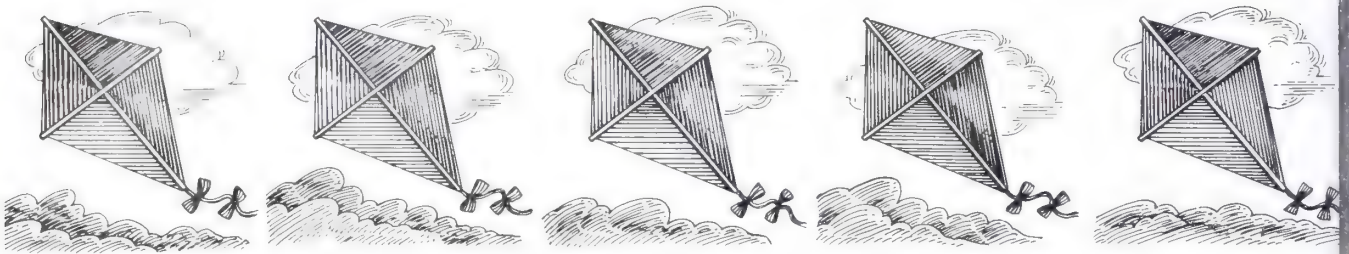


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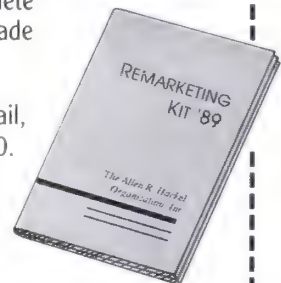


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Cover Story

struction company, practiced participative management long before it set up ESOP with a 60% equity stake in 1986. President and CEO William Solomon says that recommendations by employee committees have reduced costs by \$10.3 million since 1983. "An ESOP is significantly more effective in a company that already has a participatory program," says Solomon.

The company knows that better than anybody. Although Polaroid has no union, its top management has for years sulted on human resource issues with employees' committee elected by salaried and hourly workers. Indeed, the company's aware judge who upheld Polaroid's decision to block a takeover based on a decision partly on the company's history of participative management. Now, Polaroid has gone a step further by giving a board seat to an employee, Marian Stanley, director of market research development. It wasn't exactly a surprise when Stanley was elected in a company-wide election by Polaroid workers. Management allowed the employees to recommend Stanley and two other candidates, and the board made the final decision.

ORGANIZING: Stanley intends to bring a worker's perspective to a board filled with lawyers and investment bankers. Many Polaroid staffers resented having to take a 5% wage cut in favor of a deferred investment," she says. But attitudes have changed. "Now I hear people in meetings saying, 'As a shareholder, I don't think we should be spending this money.' It's marvelously organizing."

Of all the big public companies that have recently adopted ESOPs, Procter & Gamble has by far the most extensive experience with worker participation. In its new ESOP, employees will eventually own 20% of the company. They already have a profit-sharing plan, which was set up in 1987 and is perhaps the best in American industry. What's more, P&G is a leader in workplace innovation. In about 30 manufacturing plants, food and household goods are produced by teams of hourly workers, and for most practical purposes manage themselves.

The nation needs more active employee participation if it is to become more competitive. And the ESOP movement offers the possibility of achieving that, as well as broadening capital ownership. But if managements put ESOPs in place merely as the tax-shelter *de jour* and neglect their participatory promise, the opportunity to profoundly reinvigorate Corporate America will be lost for a time to come.

by Christopher Farrell and John Hoerr
New York, with bureau reports

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THE SAD SAGA OF A PENNY-STOCK COMPANY

Big perks for the brass, lethargic authorities, and, finally, an AWOL company

It was February, 1978, the worst winter in years, and Buffalo, N. Y., was frozen solid. But the phone lines were running red-hot between a soft-spoken, middle-aged postal worker named William Walter and his broker at First Jersey Securities. The subject: Sequential Information Systems Inc., a New York-based electronics company that the broker insisted was brimming with potential. Walter, suitably impressed, took \$5,000 of his life savings and bought 8,000 shares of Sequential common stock at 62½¢ apiece.

Eleven years have come and gone, and Sequential—one of the most widely held penny stocks in history—has vanished from public view. Its shares have no bid price. That means Walter and the 20,000 other small-time investors who bought Sequential over the years, mainly from the now-defunct First Jersey and Rooney, Pace Inc. penny-stock brokerages, cannot unload their shares—not even for a penny.

Many shareholders may not even know if the company is alive. Though it shares an office with a subsidiary in lower Manhattan, Sequential's listed phone is disconnected. For four years, it has not sent out an annual report nor held an annual meeting—a failing that does not run afoul of the federal securities laws. The last financial filing with the Securities & Exchange Commission is a sparsely worded statement for the quarter that ended Apr. 30, 1988. There's been no filing, as required by law, for the fiscal year that ended last July 31 or the two quarters since then—and the SEC has not sued to force a filing. Sequential's super-low profile has made Walter, now retired from the U.S. Postal Service, just a tad cynical. "Anybody can start a company, sell stock, and make a ton of money," he says ruefully. "They all live high off the hog, and the investors just go to hell."

Well, it so happens that Walter has very neatly summed up Sequential's recent history. According to voluminous

internal corporate records made available to BUSINESS WEEK and details obtained in interviews with a former Sequential vice-president and director, Anthony Verni, Sequential has indeed provided a very good living for its top executives as it has slid into financial Gehenna. Over the past two years, Sequential allegedly has engaged in a variety of wasteful spending practices, sap-

ping its dwindling resources with inflated business deals and flamboyant executive perks. As recounted by Verni, the main beneficiaries of Sequential largesse have been Lewis S. Schiller, 54, its CEO since October, 1987, and his predecessor, Irving E. Hertz.

Verni's decision to go public, which followed a bitter dispute with Schiller, has provided a rare inside look at the

HOW SEQUENTIAL INFORMATION WAS ALLEGEDLY MILKED



THE CHAIRMAN BUYS STOCK AT A PITTANCE...

Sequential Information Systems, Inc.
249 No. Saw Mill River Road
Roseland, New York 10506
(516) 592-5900 • Telex 71-05671212

Date: 9/3/88

To: Arthur Tapper
From: Irving E. Hertz
Subject: 5M Shares - \$15

In accordance with my Option Agreement (copy attached), I wish to exercise this Option for 5M (five million) shares of Sequential Information Stock for a total of \$5,000,000.

The stock should be sent to Marketfield Securities to be deposited in my account #1024-123, which is held by Cowi Company, their clearance firm.

Marketfield should instruct Cowi to issue a check for \$5,000 to Sequential, upon receipt of the stock.

enc
Irving E. Hertz

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NEW YORK, N.Y. 10013

Sequential Information Systems Inc.
SIS
1000 1st Ave. N.Y.C. 10017

Handwritten notes and signatures are visible on the form.

ifc ORDER FORM

Handwritten notes and signatures are visible on the form.

For Sequential, the terms were not exactly bountiful. The deal called for Sequential's electronics operations to be sold to General Aero Products Corp. of Copiague, N. Y., for \$2.7 million. But the sale to General Aero, which since has changed its name to General Technologies Group Ltd., was not for cash but for 1.5 million General Aero shares and a \$2 million promissory note that matures in 1997. The only cash immediately to change hands was received not by

...HIS JAGUAR
AND GARAGE...

Finance

Sequential but by General Aero, which was loaned \$500,000 by Sequential as part of the deal.

When Anthony Verni came on the scene as a consultant in mid-1987, his relations with Schiller were cordial. An accountant who was formerly employed by Coopers & Lybrand in Chicago and Arthur Andersen & Co. in New Mexico, Verni, now 35, worked with Sequential in putting together investment deals. Early in 1988, he was put in charge of an effort to acquire bankrupt health clubs in New Mexico. Although that foray was a failure, it apparently did not unduly upset Schiller, who hired Verni as a vice-president and had him elected to the board of directors early in September, 1988.

NO RUBBER STAMP. It was a decision Verni and Schiller were to bitterly regret. A former business associate who is familiar with (and dislikes) both men asserts that Verni was put on the board in the belief that he would be a pawn, someone who would quietly do Schiller's bidding. Instead, the two men soon began to clash.

Verni says that he took his job as vice-president and director seriously and that the company's operations began to trouble him more and more. Some of his concerns regarding the company involve legitimate but, he asserts, inept business dealings. For example, he says that in February, 1988, a subsidiary bought accounts receivable of a travel agency without properly determining their validity—and that they turned out to be based on forged invoices. Sequential, he says, lost some \$79,000.

But his allegations concerning Schiller's conduct are far more grave. He and another former employee, who requested anonymity, maintain that they both saw Schiller frequently take cash from the company for his own personal use—such as “when he needed spending money on the weekend,” Verni says. Company records obtained by BUSINESS WEEK show checks made out to Schiller, many cashed by him, that totaled \$30,654.66 in 1987, \$25,650 in 1988, and \$3,250 during the first two months of 1989. The checks were not drawn on Sequential's payroll account and were mainly in round numbers—\$1,000 here, \$1,500 there. Some of the checks have notations as “advances,” or as expense reimbursement, and others have no notation. As last disclosed to the SEC in 1987, Schiller's annual salary as president was \$111,597.

As a result of the company's si-



lence, it is not known how Sequential justifies the checks. Nor is it known whether the company was ever reimbursed for those checks or the perks that have been granted Schiller and Hertz. One of these perks is an apartment that the company rented for Schiller on Manhattan's Upper East Side two months after he became chairman and CEO. The rent is \$3,140 a month. A rider to the lease lists as occupants Lewis Schiller and another person not em-

ployed by the company. The lease stipulates that the apartment be used “for living purposes only,” not, as Schiller had described it to Verni, as an office for Sequential.

To be sure, there is some evidence that the apartment was to be used for business: Among the furniture rented in January, 1988, for a total of \$1,289.02 a month, is an “executive desk” and a “lateral file.” But an array of other furniture rented indicate that the apartment was hardly furnished as Sequential's nerve center. Company records also show Sequential was billed for the purchase in March, 1988, of “two #701 televisions” for \$600 and “two full size door mirrors” for \$420, both for the apartment. Schiller also signed a company check for \$1,294.61, dated Dec. 28, 1988, as payment for two television sets and a VCR. The purpose of this purchase is unclear, just as it is unknown if the company was reimbursed.

FANCY WHEELS. Corporate records also disclose that the company had paid for the leasing and garaging of Jaguars for Schiller and Hertz—even after Hertz left as chairman and became consultant to the company. The generosity apparently did not end there. Company records show that from March through August of 1988, the company ran up a \$16,000 limousine-service bill, which just over half was for the personal use of a friend and relative of Schiller's. The friend used the car service to trips to Manhattan locales such as

Bloomington, while the relative used the service mainly for nocturnal trips to and from various neighborhoods in the Bronx. It could not be determined if the company was reimbursed by Schiller for any of these expenses.

Verni asserts that Hertz sought to exercise restraint over Schiller's spending, but with limited success. The former Sequential employee agrees and vividly remembers “horrible screaming fights” between Schiller and Hertz in which Hertz would accuse Schiller of stealing from the company. Hertz quit the company as chairman and CEO on Oct. 19, 1987—Bloody Monday, a coincidence.

Hertz did not leave empty-handed. Under an agreement dated Nov. 1987, he was retained as a consultant at a starting salary of \$75,000 a year, with annual increases of \$5,000, and provided with the use of a car and garage. But another alleged windfall would have been more than just a perk. According to SEC re-



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Finance

ords, on Oct. 1, 1987, in a private sale, Hertz sold five million shares of Sequential stock at 5¢ a share, for a total of \$250,000. According to internal corporate records, those same shares were acquired a year before in an exercise of an option for 1/10th of a cent per share. Thus, Hertz's profit would have been \$245,000—a 5,000% return on his investment.

NO WATCHDOG. How did Hertz manage to make money in a stock that had long been worthless? Verni has a simple explanation: Sequential bought out Hertz. Half of the shares were bought by SMACS Corp., a consultant to Sequential, and the other half by Schiller "acting as agent for Sequential Information Systems," Verni asserts in a detailed memorandum that he has provided the SEC. As Verni's memorandum tells it, SMACS was to recoup, through consulting fees, the money it paid for the stock.

Schiller allegedly paid Hertz with \$75,000 in cash borrowed from a New York bank and a promissory note for \$50,000. Verni's missive to the SEC asserts that Schiller defaulted on the loan, which Verni maintains was guaranteed by a subsidiary of Sequential. If so, Sequential indirectly paid for most of Hertz's shares.

An official of SMACS, Harris Freedman, did not return calls to his office. But Schiller's son Douglas, a former officer of Sequential, does not deny Verni's account of the deal. "Certainly it can be looked at that way, superficially, but there's so much more to it than that," he said, declining to elaborate.

Whatever the validity of the company's spending practices, there's evidence that Sequential has been sapped of its only liquid asset, Treasury bills. According to internal company records, on an unconsolidated basis (not including subsidiaries), Sequential had \$1,485,930 in marketable securities—Treasury bills, according to Verni—and \$7,000 in cash as of Apr. 30, 1988. The total for T-bills is the same as was recorded in the company's consolidated balance sheet as of Apr. 30, as filed with the SEC. But a draft unconsolidated balance sheet as of Jan. 30, 1989 shows a \$45,000 increase in cash—but no marketable securities at all. Were the T-bills benignly shifted to a subsidiary? Or were they consumed by the company's carefree spending?

Verni, for one, would like to see these questions resolved by the authorities and would welcome the appointment of a receiver to oversee the company. He has submitted detailed allegations against Sequential with the SEC and the U.S. Attorney for the Southern District of New York—although neither office, he

says, has shown any interest in the matter. Officials of the SEC and U.S. Attorney's Office declined to comment.

Even if the federal authorities do not intervene, the saga of Sequential Information Systems may well be played out in court. The Sequential suit, seeking more than \$1 million in damages, is a unorthodox twist in the story of a company that has rarely followed a predictable course. It maintains that Verni misappropriated for his own use over \$100,000 in funds that were supposed to be used for various business ventures including the effort to acquire health clubs in New Mexico. That is hotly denied by Verni, who asserts that in fact

Verni submitted detailed allegations to federal authorities, who, he says, have done nothing

he had to spend money of his own in New Mexico for which he was never reimbursed. Verni's version is supported by another former employee of Sequential, who was in a position to have direct knowledge of Verni's activities in the Southwest.

DEEPER STORY? The company also maintains that Verni has stolen corporate records. Verni says that before he was fired, he removed records showing in proprieties by Sequential, that he kept them in safekeeping to prevent them from being destroyed by company officials, and that he would be more than happy to turn them over to the authorities. Verni says he was improperly removed as vice-president and director and that he intends to vigorously fight the suit—and involve shareholders in a countersuit against the company.

Douglas Schiller maintains that the story of Sequential is not black and white, and that there is another side of the story involving his father's personal problems. Unless that is understood, he says, "it looks like a complete fraud on the public, and it really isn't." But he would not elaborate.

Whatever the underlying reason for Sequential's troubles, at least one shareholder has already learned his lesson—to stay away from penny stocks like the plague. "Had some woman call me from Rochester just a couple of days ago, fast talker, insisted I buy something, said it was good. I hung up and she called back," William Walter marvels. "Never met anybody so insistent."

By Gary Weiss in New York

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But perhaps most tragic of all, these awards are reducing our international competitiveness at a time when the United States is suffering from a huge trade deficit. That means a loss of jobs and all the other adverse consequences that occur when we're outdone in the world marketplace.

This reality was reflected in a recent survey of chief executive officers by the Conference Board. It showed that uncertainty over potential liability had led almost 50% to discontinue product lines and nearly 40% to withhold new products. A clear majority

believes that the innovation and experimentation necessary to enhance our competitive position is being constrained.

In the areas hardest hit by liability suits, research and development outlays have plummeted. Products that government scientists consider safe have been pulled from the market. In a host of other areas, spending on innovation, while not eliminated, has been severely cut back.

Even if a company never loses a case, the threat of having to defend against claims can sink a product. An example: A major U.S. manufacturer has disclosed it dropped plan to market a promising new insulation, not because it posed a safety problem, but because as a substitute for asbestos, it could inevitably attract speculative lawsuits.

The Lottery

In his recently published book, *Liability: The Legal Revolution and Its Consequences*, author Peter W. Huber points out that today's court system works like a lottery. If you develop and market a product, nine juries in a row can declare it free of defects, maybe even vital to public health. But the tenth can hit you

h an award totaling millions of dollars,
h punitive damages on top of that. If you're
d often enough, you'll probably lose some
es just by the law of averages.

This lottery costs American business
ions of dollars. And that cost must be fac-
ed into the pricing equation. In some
es, this can account for an astounding 95%
product's price.

Competitiveness Hurt

So besides stifling innovation, excessive
liability awards hurt our competitive position
other way: They run up the price of our
products in world markets. Buying a product
manufactured in America carries with it the
right to sue in America. This means a U.S.
manufacturer selling overseas has to include
that exposure in the price, whereas our
competitors do not. No other country tries
to use lawsuits as an off-budget
financial program, or as a way of
second-guessing its official
regulators, to the same
extent as the United States.
America's competitive posi-
tion has emerged as a priority

issue in our national consciousness. Until now,
this concern has largely focused on trade bar-
riers. But we must also recognize that excessive
liability awards diminish our competitiveness
by handcuffing our innovators and driving up
the price of our products.

It is therefore urgent that we redefine
America's standards of liability and the level of
compensation being awarded in these cases.
Regardless of the ultimate outcome, the
Supreme Court's decision to rule on the con-
stitutionality of punitive damages is a positive
step in that direction.

But we must examine every aspect of this
issue. Most important of all, we need legislation
and judicial policies that remove the barriers
raised against U.S. international competi-
tiveness by our own excessive liability awards.
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BY GENE G. MARCIAL

PINEAPPLE PLAY: THE ACTION IN CASTLE & COOKE

The stock of Castle & Cooke, which set new highs last year, is blossoming again. Shares of the world's largest pineapple producer and major marketer of fruits and vegetables have snapped out of a tight 10-month trading range of 26 to 28, hitting a record 31 on May 2.

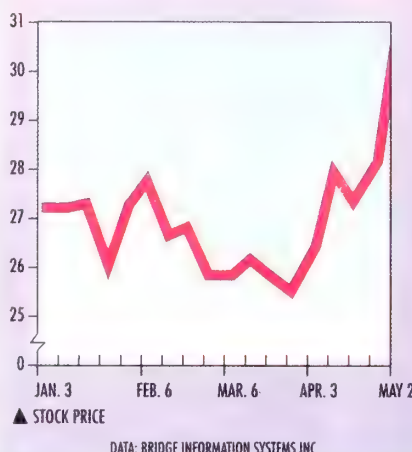
"The stock's technical behavior is showing definite signs of heavy accumulation," says Eugene Peroni, director of technical research at Janney Montgomery Scott. Castle & Cooke's breakout above 28 was pushed by an unusually strong flow of money into the stock. With some savvy value-driven players now buying in, says Peroni, Castle & Cooke could easily race up to 37 in a few weeks.

One accumulator is Chairman and CEO David Murdock himself, who already owns 23% of the stock. He took control of an ailing Castle & Cooke in 1985 and has nursed it back to financial health. His latest purchase was in March, when he bought more than 40,000 shares at around 27 a share. His investment of \$138 million is now worth \$418 million.

What's Murdock up to? If some prescient investors are right, the astute Los Angeles investor will soon cut a deal that's likely to kick up the stock price. The betting is that Murdock will spin off the company's Ocean Properties unit, and eventually take Castle & Cooke private. Ocean, estimated to be worth \$1.5 billion, owns and develops resorts and residential, commercial, and industrial real estate in Hawaii, California, and Arizona. Murdock is expected to continue running the leaner Castle & Cooke, and he wants to buy Del Monte, a competing pineapple producer, with sales last year of \$1.2 billion and profits of \$40 million, from RJR Nabisco.

Based on the market value of other food processing companies, Castle & Cooke, which owns Dole Food, appears to be grossly undervalued. General Mills, for instance, trades at a price-earnings multiple of 16.9 and H.J. Heinz at 15.7. And comparing their stock price to book value, General Mills trades at a ratio of 7.4, and Heinz at 3.6. Castle & Cooke, on the other hand, has a 12.7 p-e and a price-to-book ratio

CASTLE & COOKE BREAKS OUT TO A NEW HIGH



of only 2. An analysis by 13D Research Inc. argues that Castle & Cooke is worth as much as \$42.50 a share based on those measures. But in a takeover, it would be worth much more.

One New York money manager figures it this way: The Dole operations, with sales last year of \$2.3 billion, is worth \$47 a share. Ocean Properties is worth \$25 a share. Total value, after deducting debt of about \$7 a share: \$65 a share.

GOODRICH LOOKS STEEL-BELTED

The surprise sale of a large block of shares usually sends a stock tumbling. So when a group led by New York investor George Soros recently slashed its stake in B.F. Goodrich to 2.8% from 6%, shareholders expected the worst. But the stock hardly budged. Why? Asset-value investors think Goodrich is undervalued and an alluring takeover candidate.

Whispers are that the British conglomerate Hanson PLC has accumulated a 4% stake in Goodrich. It isn't known who acquired the block of shares that the Soros group sold. "But it may well have been Hanson, too," says one New York takeover investor, who has been buying shares. Goodrich declined comment. The company, once a major tire producer, is now the nation's largest producer of polyvinyl chloride resins and compounds. Other assets include a specialty chemical unit and an aerospace products group.

Lee Tawes, an analyst at Oppenheimer & Co., notes that the behavior of Goodrich shares in the face of the sale

by Soros "indicates that the stock starting to turn around." Tawes has raised his valuation of what he calls Goodrich's "private-market value" from \$80 a share to \$90, based on the cash-flow multiples that he assigns to the company's PVC, specialty chemical, and aerospace operations. The stock currently trades at 55.

Management, he says, has substantially increased the value of the company by broadening the line of its specialty chemical products and expanding the PVC compounds for use in computers and nonhousing products. Tawes notes that Goodrich has no debt and generates cash flow of \$12 a share.

THE OPPOSITE OF A BITTER PILL?

If tiny Clinical Technologies Associates is right, it has a medical wonder technology that will force the drug giants to do business with it. The formula? A method to convert certain drugs, such as insulin and heparin, into forms that could be taken orally instead of by injection.

So far, Clinical Technologies has won some believers on the Street. Its over-the-counter shares have doubled to 80 in just two months. Should the company be successful in getting approval from the Food & Drug Administration, "it will be a breakthrough that will make the company worth many times its current value," says David Hillson, a senior vice-president at Shearson Lehman Hutton Asset Management. He warns, though, that FDA clinical trials could take years.

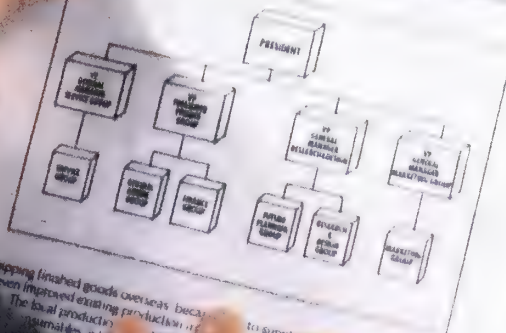
President Sol Steiner says hundreds of drugs are administered by injection because they can't survive the highly acidic gastric juices and digestive enzymes in the stomach. So far, no method has been found suitable for drugs that are peptides or more complex proteins, such as insulin or heparin.

"Our technology," says Steiner, "is capable of protecting peptides and complex proteins in the gastrointestinal tract by surrounding them with proprietary molecules that enable them to be absorbed into the blood intact." The company has applied for a U.S. patent and has been granted one by the Swiss Patent Office.

The Wyeth-Ayerst Laboratories division of American Home Products has agreed to test Clinical Technologies' process on Wyeth's heparin, a drug that is widely prescribed as an anti-coagulant.

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BEYOND THE LAPTOP: THE INCREDIBLE SHRINKING COMPUTER

Companies are aiming for pocket-size machines with desktop power

Deborah Weisman-Berman has a constant companion these days. The Glen Cove (N.Y.) engineering professor owns a notebook-size computer that's so svelte—half the weight of a normal laptop PC—that she takes it everywhere. She taps away in the doctor's office and at auto-repair shops. At a conference in The Hague, she pulled it out of her briefcase to show charts and calculations. "Portable computing is a way of life," says Weisman-Berman. "I'd never buy a desktop machine again."

Three years after the first successful laptop clones of the IBM PC appeared and spawned what is now a \$1.7 billion market, another movement is revving up: truly mobile computing. Fully equipped laptops weigh about 10 to 18 pounds, and with power-hungry screens and disk drives, they can survive only three or four hours on batteries. "There's an unfulfilled promise with laptops—they're not truly portable," says Stav Prodromou, president of Poquet Computer Corp., a Sunnyvale (Calif.) startup. The new machines are. Poquet plans to introduce a 1-pound PC this summer.

HUNT AND PECK. Stunning advances in batteries, screens, and chips are making the smaller models possible and popular. Consumers in Japan last year snapped up 2.3 million calculator-size computers. Priced at \$200 to \$300, they're best for keeping track of appointments, phone numbers, and other personal data, though it's possible to write on some of them, hunt-and-peck style. "It's a complement to the PC, not a replacement," says Irwin Joffe, director of corporate sales at Psion Ltd., the British company that makes the Personal Organiser, a handheld computer.

Now, Psion, Casio, and Sharp are planning to make their gadgets



MRS. FIELDS AND NEC ULTRALITE: "I'M TIRED OF CARRYING MORE THAN 15 POUNDS ON MY SHOULDER"

better adjuncts to desktop machines. Sharp Corp. is introducing a \$149 cable that carries data from its handheld Wizard to a desktop PC. Sharp also plans options to transmit data by phone from a pocket-size to another computer or to a fax machine. Another upcoming option is a spreadsheet that can exchange data with Lotus 1-2-3.

But what most excites buyers such as Weisman-Berman are machines that run the desktop software that laptops use—

and still fit inside a briefcase. Last fall Japan's NEC Corp. introduced the Ultra Lite, a 4-pound PC costing \$2,999 that won good technical reviews and a celebrity following—including actor Charlton Heston. Debbi Fields, president of Mrs. Fields Cookies, and her husband, a company chairman, Randy, use the UltraLite in their frequent travels. "I love laptops, but I'm tired of carrying more than 15 pounds on my shoulder," says Fields. Her one complaint: Randy hogs the UltraLite.

That little machine will soon have many rivals. Toshiba, Zenith, and Tandy are expected to offer notebook PCs this summer. Atari Corp. has announced a 1-pound PC-compatible that will cost about \$399, and several startups are developing notebook-size machines, too. Bruce Stephen, a senior PC analyst at International Data Corp., figures there will be more than 50,000 notebook-size PCs sold in the U.S. this year and more than 125,000 in 1990.

Those numbers would be bigger if the miniatures worked exactly like desktops. But miniaturization means making some sacrifices. O

A MICRO-PORTABLE SAMPLER

	Weight	Price	Comments
POCKET ORGANIZERS			
▶ Casio BOSS	5-9 oz.	\$220-\$260	Can send data to PC with \$110 option
▶ Sharp Wizard	9 oz.	\$300	Can send data to PC with \$149 option
PC COMPATIBLES			
▶ Agilis Workstation	NA	\$1,500-\$15,000	For industrial use; available June, 1989
▶ Atari Portfolio	1 lb.	\$399	Available June
▶ NEC UltraLite	4.4 lb.	\$2,999-\$3,699	Up to 2 megabytes of memory
▶ Poquet PC	1 lb.	\$2,000	Available mid-1989

DATA BW

A line of cars is shown on a test track at night. The cars are illuminated by bright lights, and a vibrant rainbow-colored light streak runs along the ground in the foreground. The scene is dynamic and futuristic.

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trade-off is disk storage. Instead of floppy disk drives, for instance, the Ultimate uses credit-card-size modules packed with memory chips. Poquet puter will use memory cards, too. Manufacturers haven't adopted a standard for the cards, so they can't be switched between computer brands. And they're expensive: \$299 for a card storing 256,000 characters of data vs. 99¢ for floppy disk storing 360,000 characters. Small screens also can limit a portable's appeal. Machines such as the Sharp Zrno, Atari Portfolio, and Casio BOSS offer only six to eight lines. That's enough for entering personal information but can make editing or spreadsheet work frustrating. Poquet's answer is to squeeze the standard 25 lines onto its 4x8½-inch foldup screen.

ETHERED. The biggest hurdle in shrinking machines may be the keyboard. Many personal organizers have calculator-size keypads that make two-lined typing impossible. Notebook-size computers support familiar typewriter keyboards, but they often are cramped. Several companies are trying to avoid the keyboard altogether by developing notebook-size computers that convert handwritten text into electronic data. "Working in a conference room just isn't going to be socially acceptable," predicts SDA Development Corp. founder Mitchell D. Kapor, now chairman of startup Unimodem Technology Inc.

Another way to overcome the limitations of a tiny PC is to give it wireless communications with more powerful, stationary computers. Agilis Corp., a Mountain View (Calif.) startup, includes each of its handheld "blue collar" computers a two-way radio to retrieve data from a larger computer. An air mechanic, say, could call up repair manuals without leaving his workplace. This is President John Ellenby, who founded laptop pioneer Grid Systems, and his "untethered computing."

Indeed, tiny computers may soon fulfill a longtime vision: For decades technology gurus have dreamed of a notebook-size machine that can act as a capable assistant. In 1968, Alan Kay, a young Xerox Corp. scientist, dreamed Dynabook—a book-size computer that recognizes handwriting and communicates with large computers via radio. More recently, Apple Computer Chairman John Sculley has borrowed the book idea in "Knowledge Navigator," his concept of a futuristic notebook computer. Now that desktops and laptops are being joined by notebooks and palm-top machines, Dynabook looks as if it's more than just a dream.

by Maria Shao in San Francisco, with reports

TELECOMMUNICATIONS

THE SMART OPERATOR UNTANGLING THE MESS AT ALC

The phone company's new chief has a canny turnaround plan

For ALC Communications Corp., bigger was supposed to be better. Created in late 1985 by the merger of two Midwestern long-distance phone companies, Lexitel Corp. and Allnet Communication Services Inc., ALC was going to challenge the heavyweights. Instead, the Birmingham (Mich.) compa-

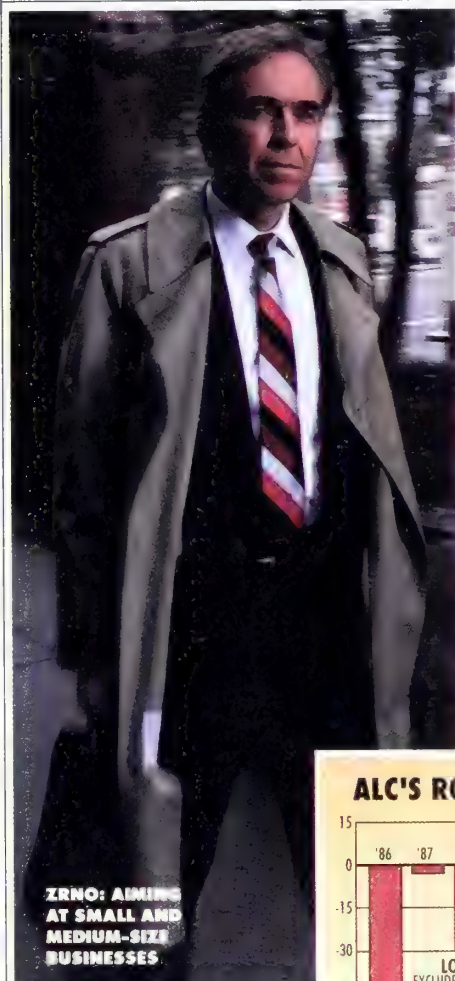
ny and hired top finance and marketing executives from his previous employer, British-owned Cable & Wireless North America Inc. Zrno is sharpening the company's focus on its long-avowed goal: to become the national long-distance carrier for small and medium-size businesses.

"We're looking at a turnaround here," says Mark S. Bergman, senior analyst at investment bankers Volpe & Covington in San Francisco. He cites Zrno's aggressive style and the 10% annual growth of the long-distance industry. ALC even managed a profit of \$170,000 in this year's first quarter, before a \$2 million special gain. And at 4½, its stock is close to its 12-month high and more than double where it stood when Zrno took over. Still, the shares would have to double again to reach their high of three years ago.

DIVIDED LOYALTIES. Indeed, ALC is trying to climb out of a deep hole. A lack of synergy between Lexitel's and Allnet's operations created billing problems, stymied coordination, and killed margins. Worse, the compensation structure at ALC encouraged salespeople to chase high-volume but low-margin residential business—even as industry pricing was falling by 39%. And ALC's 11-member board, its loyalties divided between the premerger companies, was unable to set a clear direction.

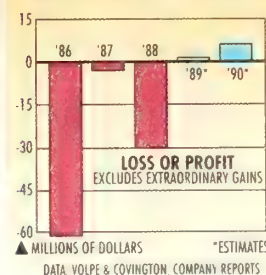
Last year, tapped out on bank loans and unable to pay many of its bills, ALC had to turn to its largest supplier for cash. Communications Transmission Inc. in Austin, Tex., which sells transmission capacity to long-distance carriers, made transfusions totaling \$30 million in exchange for 56% control of ALC.

CTI had little choice but to mount a bailout, because ALC accounted for nearly 30% of CTI's revenues. Still, CTI Chairman Ralph J. Swett says it wasn't just a defensive move: "We see a very big upside in our investment." If ALC can match some of its rivals' 10% operating margins by



ZRNO: AIMING AT SMALL AND MEDIUM-SIZE BUSINESSES

ALC'S ROCKY RIDE



ny has foundered. Its annual revenues have fallen 12%, to \$394 million, and it has lost \$93 million in three years.

Now, ALC has a new chief executive—and a revised turnaround plan. Since coming aboard last August, John M. Zrno has pulled ALC out of unprofitable telemarketing, redirected its sales force,

P

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1990, says Swett, earnings could top 40 million—all sheltered by ALC's hefty tax benefits.

Zrno may be the key to that plan. A former treasurer of MCI Communications Corp., he was recruited by Cable & Wireless in 1981 and helped develop a \$250 million long-distance business that grew 25% a year, with operating margins of 10%. The 50-year-old Zrno says that ALC lured him away with hefty stock options and the promise of autonomy from CTL.

Already, ALC has ironed out most of its billing and computer problems: reserves for uncollectible revenues have been halved since late 1987, to a manageable 4%, thanks mostly to better billing software and a decision to cut sales to residences, the source of most delinquent accounts. After taking \$46 million in write-offs since 1986 for upgrades and consolidating network equipment, ALC expects to have one of the lowest-cost networks in the industry by the end of the year.

GRAND REOPENINGS. But Zrno must also get ALC growing again. To do that, he's concentrating on winning business from customers who spend from several hundred dollars to \$2,000 a month. Such accounts cost less to bill in relation to the revenues they bring in, and they buy more expensive services. Zrno wants the smaller businesses, now 30% of ALC's customers, to make up at least 50% of its base.

To get there, Zrno is using the \$500,000 a month saved from closing telemarketing centers and eliminating 260 jobs. He is more than doubling ALC's 200-member direct sales force, and has reopened offices in Boston, New York, and Philadelphia that had been closed to conserve cash.

Providing ammo for the large sales force will take deft work. American Telephone & Telegraph, MCI, and U.S. Sprint are intensifying their courtship of business customers, using innovative pricing and service packages. Zrno is working to improve service by devising employee recognition programs. The company recently surprised one collections department employee with a \$100 gift certificate for alerting managers to declining usage—and potential dissatisfaction—of a Chicago account. "You have to change the culture," says Zrno. "It's a long-term project."

Costly, too. Zrno recently bolstered working capital with a new \$30 million bank credit line. He is also refinancing a major lease. That should fuel ALC's expansion into next year. Now, Zrno's charged sales force must deliver—ALC could hit the canvas.

By Wendy Zellner in Birmingham, Mich.

Ad
Group

PETER CALLAHAN: AN ACQUIRING MIND

Small-time publisher is scooping up the *National Enquirer*

Even in the sensational world of tabloid publishing, where humans give birth to monkeys and house turn out to be aliens, news was a shocker: In April, Peter J. Callahan emerged as the winning bidder for the *National Enquirer*, king of supermarket gossip sheets. With a bid of \$412 million, the little-known publisher of women's romance magazines managed to edge out such heavyweights as British media mogul Robert Maxwell and French publishing giant Hachette. How did he pull off the bid? Says Callahan: "Elvis Presley bid with us." Well, he helped. Twelve years ago, Callahan's New York-based Macfadden Holdings Inc. was struggling just to break even. But that August, when Elvis Presley died, Callahan rushed to issue a special one-time magazine called *Elvis Presley: A Photoplay Tribute*. It brought in \$750,000 in two weeks, Callahan says, and Macfadden has been profitable ever since. The company now publishes an eclectic group of 11 magazines—including *True Confessions*, *Teen Beat*, and *Chief Executive*—with annual sales of \$40 million. But without that much-needed "Elvis money," says Callahan, 47, Macfadden might not have turned around to bid for the *Enquirer*.

MARKETS. Callahan's latest acquisition, which he hopes to close in late May, vaulted Macfadden to new heights. *Enquirer* and its sister publication, even more sensational *Weekly World News*, may never win Pulitzers. With a circulation of 4.3 million, the *Enquirer* is No. 1 in the hot and increasingly competitive supermarket-tabloid market. Most significant is the *Enquirer's* powerful retail sales force,



CALLAHAN: RAISING PRICES TO HELP MAKE HIS \$412 MILLION INVESTMENT PAY OFF

which supervises distribution for checkout-counter racks at nearly 20,000 stores.

Now, Callahan has to make his huge investment pay off. Industry experts figure he's paying about \$50 million more than Maxwell's offer and \$100 million more than Hachette's. "He's going to have a hard time making it work at that price," says Robert Spillane, an executive vice-president of Diamandis Communications Inc., a U.S.-based unit of Hachette. Callahan and his partner in the *Enquirer* investment, Boston Ventures, are borrowing \$300 million to finance the purchase, with debt service payments of \$35 million due by the second year. Based on last year's results

for the two publications—\$15 million to \$20 million in operating profit on \$140 million in revenues—Callahan must make drastic moves to boost cash flow.

That's fine with him. The late Generoso P. Pope Jr., founder of the *Enquirer* and its publisher for 31 years, "ran it as a hobby," Callahan says. "We told our banks we intend to be aggressive with it." For starters, Callahan plans to raise the *Enquirer's* price to 85¢ from 75¢ and increase *Weekly World News's* price to 75¢ from 70¢. At current rates, that should bring \$15 million in new revenues a year. Callahan aims to trim the paper's \$12 million advertising budget and to cut paper and press costs.

EASY CHARM. Callahan intends to milk the retail sales force for all it's worth, too. Until 1987, a year before he died, Pope refused to let the *Enquirer's* 580 sales people contract with other publishers or retailers to service their display space at in-store display racks. Callahan will run the division as a profit center, representing other publications.

Expansion will be another key. Callahan and Iain Calder, the *Enquirer's* longtime editor, have two dozen ideas for products, including a Spanish-language *Enquirer*, a soap-opera magazine, and even TV shows. Callahan won't say what his first new product is but claims it will be in test markets by yearend.

Unlike the publications he is acquiring, Callahan is not flamboyant. He has a gentle manner and an easy charm. But friends point out that Callahan has an irrepressible competitive streak. Two years ago, recalls Raymond Byrne, a priest at St. Paul's church in East Harlem, a guest at a charity dinner offered him \$50 to sing "Danny Boy." Callahan took the offer as a challenge, saying: "What a piker! I'll give you \$1,000." Callahan eventually paid

\$3,000 to hear the song.

Money didn't flow so freely when Callahan was a child. The son of a truck driver, he grew up in Queens, N.Y. Working as a news delivery boy, he helped put himself through Brooklyn's St. Francis College. After getting an MBA from Columbia University and working for a few years as an accountant, he joined the corporate finance de-

CALLAHAN'S NEWSSTAND

Magazines	Circulation (thousands)
NATIONAL ENQUIRER*	4,304
TRUE STORY	1,300
WEEKLY WORLD NEWS*	1,022
TEEN BEAT	250
TRUE CONFESSIONS	157
TRUE ROMANCE	119
TRUE EXPERIENCE	114
TRUE LOVE	104
TEEN BEAT ALL-STARS	100
MODERN ROMANCE	79
SECRETS	61
DISCOUNT MERCHANDISER	38**
CHIEF EXECUTIVE	30**

*Acquisition pending **Controlled circulation
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partment at New York's Bartel Media, subsidiary of Downe Communication Inc. Its properties included the Macfadden women's group, which published romance and fan magazines. By 1974, it was Bartel's president.

Then came his big break. The next year, Downe was acquired by Chart Co., then publishers of *Ladies Home Journal* and *Redbook*. Bartel wanted to sell the women's group, which it considered too "downscale." So Callahan bought the money-losing unit for \$100,800 and an agreement to assume about \$30 million in liabilities. Next, he began expanding his publishing empire—with mixed results. He started a raunchy skin magazine called *Cheri* in 1978 but sold it in 1985. In 1980, he acquired *Us* from New York Times Co. and sold it by 1985 to publisher Jan Wenner and Telepictures Publications.

He has also dabbled, unsuccessfully, in hostile takeovers. He tried a \$500 million raid on broadcast and publishing concern John Blair & Co. in 1986 but lost out to Saul P. Steinberg's Reliant Group Holdings Inc. Last year, he was defeated by investor Ronald O. Perleman in a bid for Marvel Comics. But after losing a bidding war for *Billboard* magazine to investment group Boston Ventures in 1984, Callahan approached them about working together. When the *Enquirer* went on sale, they joined forces. The two are equal partners, but Callahan will run the publication.

MAKING A SPLASH. Staffers at the *Enquirer*, who expected Maxwell to be their new owner, were flabbergasted but pleased—when Callahan won. He has taken pains to assure them they're in friendly hands. He took the staff of some 200 out for drinks after meeting them and promised to keep the publication based in Lantana, Fla. Callahan says he won't change the tabloid's editorial direction. "The composition is doing good as it stands now," he says. In Callahan's second visit, *Enquirer* staffers had found his old high-school yearbook, which they presented to him, jokingly, to let him know they're digging into his past.

They won't have to do much digging to find out his future plans. He dreads of making a splash in business and high fashion journalism by bidding for other magazines as soon he folds the *Enquirer* into Macfadden. "I'm trying to compile a spread of publications that touches every interest," he says. "*Cher* Executive is at one end, and the *Enquirer* is on the other." That's a tall order. But then, who can argue with man who has Elvis on his side?

By Andrea Rothman in New York, with Gail DeGeorge in Miami

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LEASING

A NEW ROLE

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MONEY TO MANAGEMENT AS
THEY ADD SERVICES TO FINANCING.**

It would be hard to imagine running a business without leasing. Industry observers estimate that eight out of 10 companies in America lease equipment of some type and that leasing accounts for roughly 25% to 30% of all capital acquisitions by business. The reasons why companies choose to finance equipment through leases are almost as varied as the types of leases offered. Some want to preserve borrowing capacity. Others want off-balance-sheet financing or more flexible financing terms. Still others want to lower the risk of unforeseen changes in technology. Tax considerations also motivate many to lease some portion of their assets.

In today's competitive business climate, however, traditional financial considerations are often only part of the asset-financing formula. Many leasing companies have become more than a source of capital, developing new "value-added" services that have taken them from asset financiers to asset managers, or forming relationships with others that can provide these ser-

vices. In the case of some sophisticated customers looking to dedicate their resources to core businesses, lessors have even evolved beyond asset management services to actual partnership arrangements.

Although car and truck lessors in general offer the widest array of services bundled with their financing packages, others specializing in computer and telecommunications equipment, aircraft, industrial and manufacturing equipment, office machines, and health care equipment have found ways to turn their expertise into new or expanded customer services. Even strictly financial lessors offer their knowledge of international money markets and financing options as consulting services to customers in search of the best possible asset acquisition packages.

"Customers want more than money," says Jim Rogers, President of G.E. Capital Fleet Services Inc., a unit of G.E. Capital Corp. that provides "asset management" for automotive fleets.



Randy Jones '89

Although once strictly a leasing and financing company, Fleet Services has moved away from that "plain vanilla business" in the past five years to offer "value-added services," according to Rogers.

"In fact, I don't perceive us as a leasing company anymore," he says. "We manage fleets of vehicles for companies that don't want to manage them. We're indifferent to whether the vehicles are leased from us, company owned, or driver reimbursed."

The company's value-added services start with "proactive" acquisition planning and run right through to a full menu of disposition strategies. "We can provide licensing and titling services, fuel, preventive maintenance, accident management, and other services that can lower a company's total costs and add value at the same time," Rogers explains.

While it might seem something of a contradiction to offer both lower costs and improved service, he points out that large lessors like Fleet Services, which has some 240,000 vehicles under lease and manages another 200,000, can take advantage of national account/vendor relationships and other volume-based opportunities that might not be available to a customer managing its own fleet. The company's expertise in vehicle management also means that it has the proper information on hand to maximize residual values when it comes time to retire equipment. "For example, depending on conditions, we can set up a program to sell the vehicles to their drivers, or to remarket them at auctions or to wholesalers," he says.

"The bottom line is that Fleet Services acts as a consultant and analyst for its customers and then offers the most appropriate services for their operations," Rogers explains. Compared to "money over money" arrangements, he says, providing value-added services gives lessors "the ability to retain customer loyalty and enhance our returns. The whole industry is moving that way."

COMPETITIVE EDGE

The trend is being driven by competition, according to Kenneth Steinback, Chairman and CEO of Computer Sales International (CSI). "Those that can invest in reconditioning services for equipment coming off lease and other value-added services have a competitive edge," he says.

Customers look to computer lessors like CSI, which has annual revenues in excess of \$100 million, for product knowledge, creativity in configuring systems, and remarketing. "In a sense, all we do is provide service," says Steinback. "We're experts in the field of computer equipment, how to acquire it and finance it, how

to maintain it. Every lease involves services, even if it's only pre-sales consulting."

Extensive remarketing services that maximize the residual value of the leased equipment lower the customer's total cost and help differentiate CSI from its competition, he explains. "We offer full reconditioning service, from refurbishing to storage," Steinback says. "And then we can retail the used equipment."

BUNDLED SERVICES

The need to differentiate itself from competitors led Dataserv Inc., a subsidiary of Bell South Enterprises, to develop value-added "bundles" for its lease customers. Although 50% or more of its revenues come from computer hardware leasing, Dataserv sees itself as a parts supplier and software maintenance company.

"We offer full reconditioning service, from refurbishing to storage."

Kenneth Steinback,
Chairman and CEO
Computer Sales International

"Actually, we use our leasing dollars to add value to our services," says Jim Meyers, President of Dataserv Inc. "We've come to call it 'a financing option' not a lease because of the bundled services we include."

For example, Dataserv will act as a software consultant for a customer, take its old computer equipment in trade, provide new equipment, software and wiring, and maintain the new system all as part of an equipment lease.

"The majority of companies leasing computer systems are still primarily finance lessors," says Meyers. "We do occasionally write stand-alone leases, but for the past year or so our strategy has been to bundle services with the financing. Not many others do that. Adding value makes us different."

LOOKING INWARD

Companies that in the past might never have considered leasing to finance new equipment acquisitions are also responding to tougher competition within their own core businesses as they take a new look at the advantages of the services that now come with many leases.

Many companies operating private truck fleets to support their core businesses have taken advantage of "full-service" truck leasing for some time. Truck-

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Model**	USED VALUE/% RETAINED OF DEALER INVOICE		
	1988	1987	1986
Camry Deluxe	10,800-92%	9,317-83%	7,109-71%
Ford Taurus GL	9,011-80%	7,399-67%	6,187-60%
Pontiac 6000	8,273-77%	6,644-65%	5,162-53%
Oldsmobile Ciera	8,388-75%	7,030-66%	5,447-53%
Buick Century	8,388-74%	6,963-65%	5,515-54%
Chrysler LeBaron	7,941-73%	6,576-63%	5,333-54%
Chevrolet Celebrity	7,977-75%	6,312-63%	4,897-52%

**All vehicles are 4D sedans equipped with standard 4-cyl. engine AT, PB, PS, AC and TC, as listed in the Kelley Blue Book New Car Price Manual (6th Edition). Used vehicle values are from Automotive Market Report, Zone 1, Clean, December 14, 1988 (Domestic) and December 21, 1988 (Import) issues.

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leasing customers "are still looking for the same basic services," says Brian Hard, President of Penske Truck Leasing Co. "The thing that has changed is the increased intensity with which they approach their own business."

This renewed concentration on reducing business costs, combined with trucking industry deregulation, has meant that more and more private fleet operations find themselves competing with hungry, efficient for-hire carriers for their parent company's distribution dollars. "Companies with private truck fleets are demanding the most efficient operations possible," says Hard. "They can't tolerate the expense of vehicle down-time or less than

SPECIAL ADVERTISING SECTION

work, as well as obtaining the required licenses and permits. It also keeps track of the many local and state fuel and road-use taxes imposed on commercial vehicles and prepares the tax returns for its customers. It will also supply rental equipment at preferred rates to its lease customers so they can avoid leasing "extra" equipment to meet seasonal or cyclical peak distribution demands.

And at the end of the lease, Penske disposes of the equipment, usually assuming the market risk on its residual value.

A national shortage of trained truck drivers and a growing reluctance by many companies "to develop the management programs needed to deal with that portion of the labor force," should lead to a continued increase in that trend, he says.

GETTING RID OF HEADACHES

The widening array of services being offered by lessors tends to center around assets that are peripheral to a company's business yet take a great deal of effort to manage well. "Leasing is a financing function that provides a company with assets," says John Maslanka, Vice President of Marketing at PHH FleetAmerica, a subsidiary of PHH Corp. that leases and manages over 300,000 cars in the U.S. "It's the services that come with the lease that provide the most cost-efficient operation of those assets, especially when they're the

"Today, customers are looking for services that are far broader than asset management."

Doug Slack,
Senior Vice President of Sales
Ryder Systems Inc.

kinds of things that companies can't duplicate themselves."

"That's why we look at ourselves as a provider of services centering around a specific asset, not as a finance company," adds James Noonan, FleetAmerica's Executive Vice President. While other lessors acquire and dispose of car fleets and leave the management up to the lessee, "We're more of a life-support system for a company's fleet," he says.

The "cornerstone" of that system is FleetAmerica's expertise and experience, which allow it to accurately assess a company's transportation needs, says Noonan. "A company's cars are generally not an essential part of its business, so they tend to see them as thousands of purchases at \$10,000 each," he says. "We help them see the fleet as a single, very large asset. More and more companies understand that the management of some assets is complicated and requires specialized knowledge. And if those assets aren't central to their business, then they're more than happy to hand off that headache to someone like us."

FleetAmerica's services start with acquiring vehicles and delivering them to drivers anywhere in the country. If the customer wants PHH to manage the fleet, it establishes repair policies, and drivers are issued credit cards that give them access to a network of suppliers providing main-



optimal fuel economy. All indications are that private fleets are moving from vehicle ownership and alternative ownership arrangements like finance leasing to full-service leasing."

As a full-service lessor, Penske "does more than just provide customers with trucks and maintenance services," Hard explains. "We have a consultant relationship with our customers. We help them choose the right vehicles, help them with routing, help them train drivers and set up safety programs."

Over the life of the lease, which generally runs three to six years on trucks and five to 10 years on trailers, Penske provides all of the maintenance and repair

Currently, the company, which is a limited partnership between Penske Corp. and G.E. Capital Corp., is the country's second largest truck lessor with 55,000 trucks and trailers under full-service lease and rental fleets.

Carrying the full-service concept one step further, some companies with leased private fleets are showing increased interest in dedicated contract carriage, according to Hard.

With contract carriage the lessor provides a dedicated transportation management system to the customer, which includes all of the vehicle and maintenance elements of a full-service lease as well as drivers, supervisors and distribution.

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CHEVY: (eagerly) Well, what do you think?

YOU: (not about to be rail-roaded) So this is Lumina.[™] The one you say is "the next generation of the perfect fleet car."

CHEVY: Right. The perfect fleet car, 1990.

YOU: Love the looks. But it's gonna take more than that to replace Celebrity.

CHEVY: Exactly. That's why Lumina also has the most passenger room of any domestic

mid-size. And more power and torque than Taurus.

YOU: I'm impressed. (alarm goes off) But that means my fuel costs go up.

CHEVY: As a matter of fact, Lumina matches Taurus in EPA estimated MPG on standard engines. And beats it in the optional V6 with EPA estimated 30 MPG highway*.

YOU: How'd you guys do that?

CHEVY: Technology. Lumina's a 1990 car.



YOU: And the price of all this technology?

CHEVY: Low. Lumina's a Chevrolet, remember.

YOU: Right. And windshield wipers are extra.

CHEVY: AM/FM 4-speaker stereo, reclining front seat-backs, tinted glass, twin outside sport mirrors, sport wheel covers, twin visor vanity mirrors, power steering, 4-wheel disc brakes, automatic, carpeted trunk, Scotchgard™ Fabric Protector,† dual-note horns,

stainless steel exhaust system and clear-coat finish are all standard. Along with fluidic windshield wipers.

YOU: And Lumina's still...?

CHEVY: Priced like a Chevrolet.

YOU: Perfect. Absolutely perfect.

*1990 Lumina with optional 3.1L V6 engine EPA est. MPG city 19/highway 30
†Standard interior only

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tenance, repairs, tires, and other supplies at volume-discount prices. All bills are audited by PHH and consolidated for the lessee. If a vehicle is in an accident, the company will make sure that it's taken to a qualified repair shop and then negotiate for the repairs or, if it's a total loss, arrange to have it sold. And at the end of the lease, PHH takes whatever steps are needed to maximize the resale value.

"The whole point is that we provide womb to tomb management," says Noonan. "And no matter what the size of their fleet, our customers get the benefit of our size and expertise."

BEYOND ASSET MANAGEMENT

As the country's largest full-service truck lessor, the Vehicle Leasing and Service Division of Ryder Systems Inc. (d.b.a. Ryder Truck Rental) sees its customer

SPECIAL ADVERTISING SECTION

Pushed by its largest customers to go beyond asset management, Ryder is now providing materials management, warehousing, and information services that may actually increase the customer's equipment costs but decrease the overall cost of distributing their products while improving overall service to the lessee's customers, Slack points out.

For example, a major domestic copy-machine manufacturer was losing market share to imports because the lead time between a customer's order and delivery was running four to six weeks, while the imports were being delivered within three to seven days. Ryder has set up a network of 13 warehouses east of the Mississippi for them stocked with copier parts, Bing-

or retail outlets. "Again, their equipment costs have gone up, but their overall costs have decreased," says Slack.

In the case of four auto manufacturers, Ryder has developed, and now operates, in-bound just-in-time delivery systems. Requiring extensive information management to coordinate deliveries with assembly-line requirements, the JIT system relies heavily on Ryder's information systems capabilities, Bingham points out.

Although this kind of sophisticated service now only accounts for about 10% of the leasing division's revenues, "it's the fastest growing portion of our business," he says.

"Financing is usually the thing that drives companies to look at leasing," adds Slack. "But once they start taking advantage of our services, the financial part becomes less important."



services extending well beyond asset financing and even beyond asset management.

With the growth of full-service leasing that prospered in the 1970's, customers turned over responsibility for the acquisition and maintenance of trucks, fuel and administrative services to lessors like Ryder, says Doug Slack, the division Senior Vice President of Sales. Then with industry deregulation in the early '80s, truck-lease customers began demanding driver-management services and help in designing transportation systems, he says.

"Today, customers are looking for services that are far broader than asset management," Slack says. "In fact, with sophisticated customers the physical assets aren't even at the top of their list of priorities. They want us to look at their total distribution system and find a way to reduce costs and improve service."

"We provide a lot of services for all of our lessees," adds Gordon Bingham, Senior Vice President of Strategic Planning. "Most are interested in 'basic' full-service leasing. Even with the smallest leases, there are opportunities for significant cost savings. We want to know about their needs, objectives, goals. We want to talk about how we can be partners."

ham explains. Orders are now sent electronically to the nearest warehouse where Ryder employees assemble the proper copier model from the stocked components, deliver it, set it up and train the customer, all within a week.

"Our customer is freed of that distribution operation," says Bingham. "Their delivery time is improved. Their customers get better service, and the costs are down. We've driven the costs out of their delivery system and still improved their service."

Similarly, Ryder has taken a costly link out of the distribution chain for major retailers by setting up systems that deliver appliances and furniture directly from manufacturers to customers, bypassing costly reshipping from distribution centers

BOUTIQUE LEASING

As service gains in importance, lessors are moving to specialization, according to Robert Laughlin, Division Executive for Citicorp's Equipment Financing and Leasing Division. "Increasingly, customers are looking for specialized lessors, looking for someone with knowledge of a specific asset and the way it's used," he says. "The trend is to set up more and more 'boutiques,' to provide a full range of financing services, not just leasing, in specialized areas."

Specialization among finance lessors gives them two advantages. "The better you understand an asset and the way it's used, the more flexible you can be in financing it," says Laughlin. "Customers are also looking at how quickly you can service their leases. For example, franchise lease packages are one of our specialties. It can take a long time to figure out a package like that the first time, but after doing a few, you can turn them around quickly."

Just as business is looking with increasing frequency to automotive lessors to manage nonessential operations, financial lessors like Citicorp with specialized operations now see some manufacturers with captive or in-house leasing programs asking them to take over at least a portion

**"Actually, we use
our leasing dollars
to add value to our
services."**

Jim Meyers,
President
Dataserv Inc

Product proliferation. It gobbles up shelf space and offers only increased out-of-stocks in return.

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of those programs. "All of corporate America is looking hard at its returns and selling off operations that are outside of its core businesses," says Laughlin. "About a year ago, we saw manufacturers begin to examine their captive (leasing) operations. They're asking, 'Should we run it? Should we lay off certain elements?' More and more are taking advantage of financial lessors' auditing and computer systems."

Recently, for example, Citicorp took over captive leasing and financing operations from Deutz-Allis Corp., a manufacturer and distributor of agricultural equipment, and now provides full financing services for Deutz-Allis dealers.

SPECIAL ADVERTISING SECTION

This trend among captives is not confined to one industry, according to Laughlin. "We're talking to a number of companies involved with all types of equipment leasing," he says.

"These are discussions that never took place before," he adds. One reason is that competition among lessors has intensified in recent years, driving lessors to provide better services, services that specialists can provide. The trend towards providing more services has also been "dramatically accelerated by tax reforms,"

says Laughlin. "Tax reform changed the nature of the leasing business" since it diminished the value of investment tax credits. Lessors, he explains, have had to replace lost tax advantages with new reasons for leasing, including services that come bundled with the financing.

DIFFERENT MARKETS, DIFFERENT SERVICES

The move to deregulate much of American industry also helped bring about a basic change in the leasing industry, according to Ron Larson, Senior Vice President of First Bank System Inc. (FBS) and head of the bank's National Leasing

RETAIL LEASING

While businesses rely on leasing to finance all sorts of equipment, consumer interest in leasing centers almost entirely on new cars. And, say auto makers, that interest is growing, especially for luxury and imported cars. In retail leasing, the main question for a consumer is "How much a month do I pay to drive the car I want to drive?" says Paul Payne, Senior Vice President Field Operations for Mercedes-Benz Credit Corp.

As a captive lessor for Mercedes-Benz dealers, M-B Credit is involved in finance type leasing only, says Payne.

risdictions, sales taxes on a leased vehicle can be paid over the life of the lease, and the customer might never have to pay taxes on the residual value of the vehicle, he points out. Also, lessors like M-B Credit obtain financing "at wholesale," he says, and in turn can offer "a relatively attractive cost of funds" to leasing customers.

But the main financial advantage of a car lease, says Payne, is that it lowers monthly cash payments since the consumer isn't financing the residual value of the car when it's turned in at the end of the lease.



Unlike business leasing customers, retail customers don't really want or need "value added" services from lessors. For example, a new Mercedes carries a 50,000 mile warranty, so bundling maintenance or repair services in a lease package "wouldn't make much sense," Payne explains.

However, recent interest in financing new car purchases through leasing has been spurred by a number of factors. First, says Payne, the 1986 federal tax reforms have phased out consumer loan interest deductions and removed the tax benefits of a financed car purchase. In many tax ju-

Consumer car leasing "is definitely becoming more popular," says Tom McGurn, General Manager of Corporate Communications for BMW of North America Inc.

About six years ago, the luxury car importer set up a captive leasing operation in a joint venture with G.E. Capital Corp. "to give customers an alternative way to get into one of our cars," he says. Leasing has grown from about 15% of the company's car transactions in 1980 to nearly 28% last year, according to McGurn. BMW expects leasing to approach 30% in 1989.

While tax reform has had some ef-

fect on the popularity of leasing, more and more car buyers are interested in "cost per month rather than total cost," McGurn says. "A lease simply offers the lowest capital outlay."

Recognizing that growing interest, some automakers have even begun adding leasing incentive programs to complement rebate and other sales incentive programs. Toyota, for example, is currently offering special lease rates on its top-of-the-line model, as well as special option packages for leased cars.

Other auto makers without established in-house leasing operations have moved to find financial partners to help them compete for leasing dollars. Just last year, Peugeot Motors of America Inc. reached an agreement with Security Pacific National Bank to provide its dealers with a corporate leasing program.

"We felt we had to have a leasing program to remain competitive with other luxury car makers," says a Peugeot spokeswoman. Not only does leasing lower monthly costs, but it also offers shorter terms than financing, allowing consumers to get into new cars more quickly, she points out.

In just over a year of operation, leasing has already grown to account for nearly 20% of the company's sales, the Peugeot spokeswoman says.

The auto industry's newest retail leasing operation was unveiled at the beginning of the year by Mitsubishi Motor Sales of America Inc. A joint venture with G.E. Capital, Triple Diamond Leasing is expected to account for 15% to 25% of Mitsubishi's 1989 sales, according to Kevin Ormes, the company's General Sales Manager.

When today's consumers look at buying cars, Ormes explains, they look at the whole picture — higher finance rates, terms as long as 60 months and resale values that may not be all that high at the end of a five year loan. By comparison, he says, "a lease can look pretty good."

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Group. "Deregulation created a need for more flexibility," he says. In trucking and the airline industry, for example, short-term leasing has become an important strategy to help companies respond quickly to competitive changes. Today, Larson says, lessors "have to be more than credit specialists."

In response to deregulation, as well as tax reforms, FBS has divided its capital-equipment leasing operations into narrower market groups specializing in transportation, high technology, and general equipment. "There is a broad need to provide value-added services like asset and information management," says Larson, "but by organizing the group into market areas, we can give customers more expertise in their particular industry in terms of credit, equipment, and residual value."

For example, he says, "the cost of financing is not the issue for companies with

SPECIAL ADVERTISING SECTION

ply those services and form partnerships to offer their customers financing," Larson explains.

In each of its market areas, FBS' leasing group is actually functioning as "a financial engineer rather than as traditional lessor," he points out. "We don't have a pre-determined leasing product line. We look at an equipment need and help the customer determine the best financing solution."

NO. 1 STRENGTH

Despite the new emphasis on value-added services, "the number one strength of lessors is still their expertise in structuring financial arrangements," says William Montgomery, President of Xerox Credit Corp. and Chairman of the American As-

equipment," says Montgomery, "and we don't suggest that people purchase one type of equipment over another."

Value-added services do have an important place in leasing, he adds. Computer leasing, for example, is one area where "value-added services have really come into play in recent years," according to Montgomery. And while Xerox is not involved in the computer leasing business, it does have some copy equipment leases where it provides both the machinery and the personnel to operate it.

The same type of "total-service" lease is also proving popular for magnetic resonance imagers. Area hospitals get together to lease an MRI set up as a mobile imaging center that moves between the hospitals on a scheduled basis. "We have leases on about 30 of these mobile imaging centers," says Montgomery. "We not only finance the MRI, but also provide the tractor and trailer to house it, the driver, and sometimes the technicians to operate it."

MORE THAN FINANCING

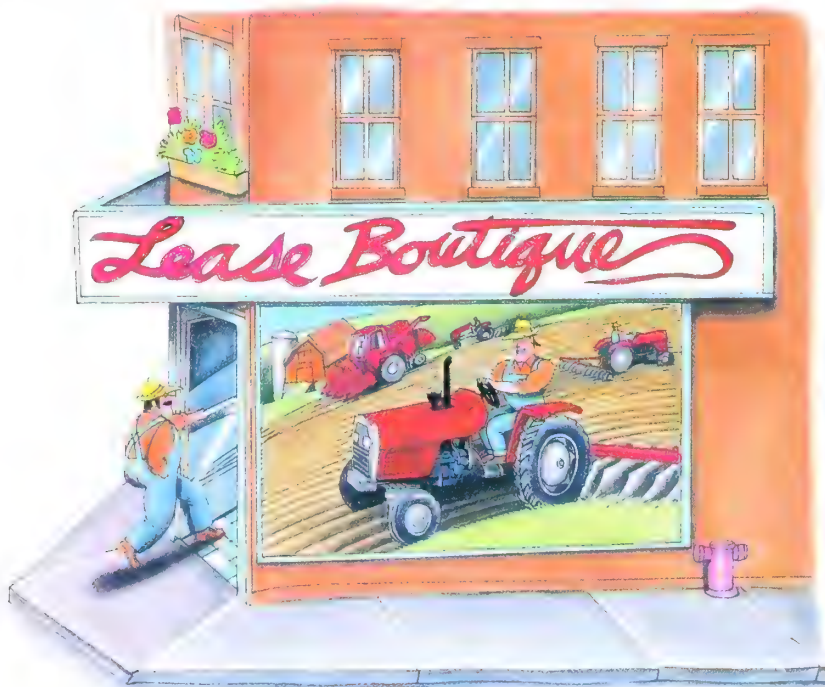
As Manager of Business Development for commercial equipment financing at G.E. Capital Corp., Randy Waring agrees that "customers are looking for more than financing from lessors."

A generalist participating in virtually all areas of equipment financing, Waring's division of G.E. Capital seeks to provide "other services that go easily with our financing services," he says. In some cases that means arranging "vendor" programs for equipment dealers and manufacturers that give them the flexibility to complement their sales and service operations with lease financing.

In other cases, the division's flexibility means it actually offers customers fewer services than another lessor. In truck leasing, for example, "some customers don't want the whole full-service package," says Waring. "If they only want part of the package, we can arrange that."

There's no doubt in Waring's mind that equipment leasing has changed in the last few years, adding an array of services to its primary financing benefits. "A lot of companies are taking a back-to-basics approach to their businesses," he says. "They can't justify the cost of that transportation operation, or phone system, or computer, and they can't keep up with all the changes in technology. They want to focus on their core business, and they're looking to outsource all those ancillary services to someone like a lessor who can choose the right equipment, finance it, maintain it, and bundle it all together in a way that's less costly and more convenient."

This Special Advertising Section was written by Jim Mele, Senior Editor of Fleet Owner magazine.



large auto fleets. Delivery, resale, transportation management services, those are the key issues for these customers." As asset managers specializing in transportation, FBS "can target the intermediaries that can provide these services," Larson explains. As information managers, the company's transportation specialists "maintain libraries of information on the market so they can measure these costs. They can evaluate the key tax and accounting issues to help the customer find the best financing, whether it involves a lease or some other financing solution."

Similarly, systems engineering support, software development, disaster recovery, and equipment resale are important to lessees in the high-tech computer and telecommunications field. FBS' strategy in that market is to "target clients that sup-

sociation of Equipment Lessors, a leasing industry trade group.

Still, special knowledge of a market is important, he feels, because "it can make a contribution in structuring a deal and help a lessor be more than a price quoter." For example, "if a lessor is up to speed on the quality of various aircraft and on airline industry conditions, it can suggest the most appropriate structure for an aircraft leasing package," Montgomery says. "That gives a customer more confidence in us and helps us develop a partnership relationship."

Xerox Credit finances assets worth about \$2 billion every year, \$1 billion under captive leasing services for its parent, Xerox Corp., and \$1 billion as an equipment lessor competing in the open market. "We don't attempt to be experts on all

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TASTING WINES AT THEIR SCENIC SOURCES

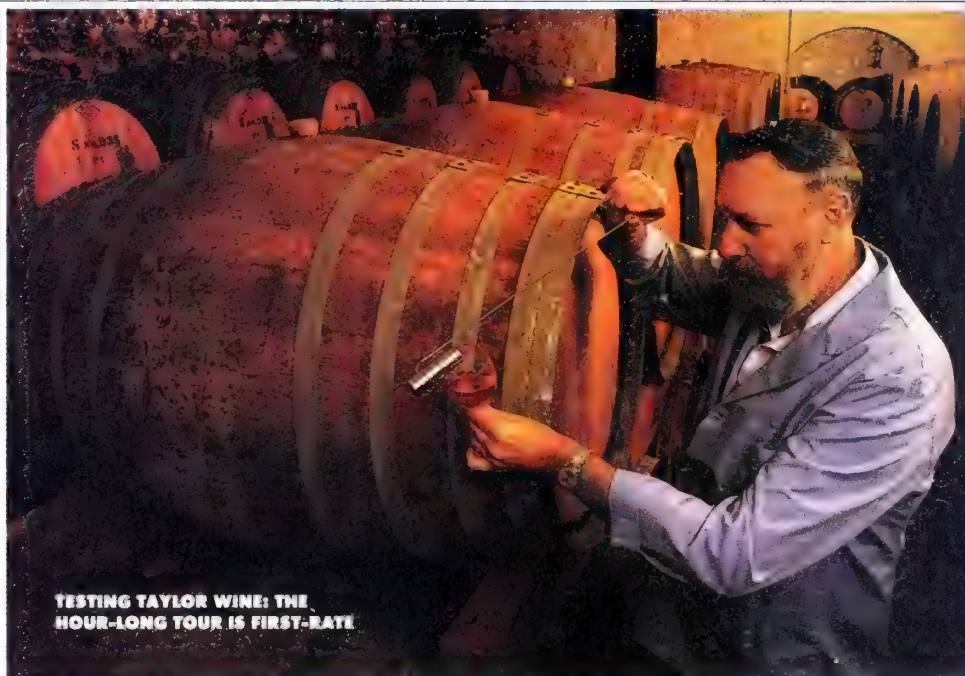
There's little argument that some of the world's finest wines are made in the U.S. And on the theory that a river is sweetest at its source, wine tasting at vineyards has become a popular summer pastime. Yet even in some of the country's most well-trodden areas, there are still discoveries to be made. *BUSINESS WEEK* offers you a tour of some of the more interesting wineries on both sides of the Continent.

CALIFORNIA

RUGGED COASTLINE, STURDY WINES

Wine tasting in California has become synonymous with a trip to the lush Napa and Sonoma Valleys, an hour or so north of San Francisco. Those areas are home to several hundred wineries and boast some of the world's finest grape-growing conditions. Nowadays, though, the two valleys also are home to traffic snarls and mob scenes.

Sipping cheek-by-jowl with the masses isn't your style? No problem. You can find wineries in 43 of California's 58 counties, and many of them make good wine. One region that's becoming an important new wine center is Monterey County, a couple of hours south of San Francisco via Highway 1. While the name may conjure up images of majestic cypress trees swaying in the ocean breeze, the fog blown in by that same breeze creates a cool climate in the northern end of the Salinas Valley, just over the first coastal mountain range.



TESTING TAYLOR WINE: THE HOUR-LONG TOUR IS FIRST-RATE

Unlike the clustered vineyards of the compact, narrow Napa Valley, Monterey's 15 or so wineries are spread far apart. Major hotels in the city of Monterey as well as the local visitors' bureau offer guides to the wine country.

One option would be a loop tour that could easily take most of a day and include a scenic drive along the Salinas River. Start in Gonzales, about 20 minutes from Monterey, by dropping in at Monterey Vineyards, which offers daily tours and a large tasting room.

HOG'S BREATH. If you start early, you can make it in time for lunch at Jekel Vineyard in Greenfield, about 20 minutes south of Gonzales on Highway 101. Call ahead if you'd like a tour as well as a taste, but Bill and Pat Jekel invite you to bring a picnic lunch to their arbor overlooking the vineyards. As you make your way back north, head west on Carmel Valley Road and sample chardonnay, merlot, Johannisberg riesling, and sauvignon blanc at Chateau Julien Wine Estate.

Try to spend at least one

night in Monterey or Carmel. If you're still in the mood to taste wine, both Paul Masson and Monterey Peninsula wineries have special tasting rooms on Cannery Row in Monterey. The Smith & Hollander Winery operates a tasting room in Carmel.

Take the 17-mile drive through Pebble Beach, and you'll enjoy stunning views of forests and cliffs as well as famous golf courses. In Carmel, you may even spy former Mayor Clint Eastwood at his tavern, the Hog's Breath Inn.

Joan O'C. Hamlin

NEW YORK

THE VINE-GIRDLED FINGER LAKES

Don't listen to anyone who says New York State wines are mediocre. For a long time many were and some are still cloyingly sweet or made from undigni-



JEKEL VINEYARD: TOUR AND TASTE, THEN UNPACK YOUR PICNIC LUNCH

ished grape varieties. The mate isn't ideal for making great reds, in any case. But a growing number of sophisticated winemakers in the Finger Lakes are turning out the excellent chardonnays, rieslings, gewürztraminers, and dessert wines. Some of the best can be found on the slopes above Seneca Lake in the heart of the region. Belhurst Castle, an elegant room inn in Geneva at the top of the lake, is one of the finer lodgings in the area. From there, for an easy day of wine tasting, head south on Route 14 toward Watkins Glen. Among several wineries, one to watch for is the rustic Hermann J. Wiemer Winery, near Dundee. German-born Wiemer, 47, was one of the first Finger Lakes winemakers to grow such classic European vinifera grapes as chardonnay and sauvignon blanc. His wines are served in first class on American Airlines flights and in several top Manhattan restaurants.

WINERY. Continue on to Watkins Glen at the foot of the lake, pick up Route 414, and head north up the east side of the lake toward Lodi. When you'll reach the village of Hector, home of Hazlitt Vineyards. There, in the rustic-style tasting room, you'll get a feel for a typical farm winery of the region. A few minutes north, just outside of Lodi, is Wagner Vineyards, home of one of the best wines in the region. Wine critic Robert M. Parker Jr. has called Wagner's chardonnay "explosively rich" and one of the best in the country. The current vintage sells for about \$11 a bottle. One detour to consider is a mile jaunt west from Watkins Glen to the charming town of Hammondsport, at the foot of Keuka Lake. The village is home to several wineries, including huge Taylor Winery Co. Its lavish visitors' center is world-class, and the year-long tour is by far the most extensive and informative in the region. Try the Rambling Estate Bottled 1987 and the finer champagnes and sparkling wines.

Bob Neff

Collecting

GLASNOST IN THE GALLERIES: THE SURGE IN SOVIET ART

For years, artists, like everyone else in the Soviet Union, hewed to a strict party line. Those who didn't paint within the confines of state-sanctioned "socialist realism"—that is, idealized portraits of Lenin or the proletariat—were deemed "unofficial" and forbidden to show or sell their work.

But in 1986, that began to change. Gorbachev, *glasnost*, *perestroika*, and a desire for hard Western currency led the Kremlin to allow Soviet artists to show, sell, and export to the West works that had once been considered subversive. "Dissident, unofficial, left-wing, right-wing—all those terms are meaningless now," says Nathan Berman, director of

Soviet art: Oleg Tselkov, an emigré whose paintings feature contorted faces and figures in bold, primary colors and fetch from \$20,000 to \$100,000, and painter/sculptor Ernst Neizvestny, whose works sell in the \$15,000-to-\$200,000 range. His bronze sculptures are on view at Nakhamkin's New York gallery through June 9.

MOCK HOMAGE. Other Soviet artists who have become international celebrities are Ilya Kabakov, a Moscow painter whose work now goes for as much as \$250,000, and the team of Vitaly Komar and Alexander Melamid, two witty,

traits of workers from the Bergen Point Brass Foundry in Bayonne, N.J., where the two artists now have a studio.

This may be an opportune time to buy, since Soviet art can still be found at relatively modest prices. If the Soviets

VITALY KOMAR AND ALEXANDER MELAMID'S "EVENING AT BAYONNE"

Eduard Nakhamkin, a U.S. gallery dedicated exclusively to contemporary Soviet art. "Absolutely anything is allowed."

These days, many artists who once had their outdoor shows bulldozed by the KGB are selling their work as fast as Western art dealers can snap it up. Last July, \$3.6 million worth of paintings were sold at the Soviet Union's first commercial art auction, a joint venture between its Culture Ministry and Sotheby Parke Bernet. Grisha Bruskin, whose work had fallen out of favor with the Soviet authorities and whose canvases had been selling for \$7,500 a few years ago, saw his mural, *Fundamental Lexicon*, go for \$415,000.

Demand is still building. Berman expects Nakhamkin's sales to double to \$10 million this year. Nakhamkin's six galleries feature two of the biggest names in

irreverent emigrés now showing at the Ronald Feldman Gallery in New York. The majority of their works sell for around \$75,000 and range from paintings that pay mock homage to Stalin by portraying him next to the words "Thank You Comrade Stalin for Our Happy Childhood" to sunset landscapes and por-

trays of workers from the Bergen Point Brass Foundry in Bayonne, N.J., where the two artists now have a studio.

One source is Gallery Lory (203 838-7226) in South Norwalk, Conn., which is showing *The Art of Contemporary Russia* through May 15, featuring works by Anatoly Makhov, Vyacheslav Mikhailov, and Vitya Dlugy. Their paintings are in the \$3,000-to-\$15,000 range.

If you're more interested in browsing than buying, the Chicago Art Fair on May 10 and 11 will feature Bruskin and other Soviet artists, and the San Diego Arts Festival will exhibit *Treasures of the Soviet Union*, from Oct. 21 to Nov. 11.

Laura Zinn

"ACTOR'S MEMORY" BY MOSCOW ARTIST ANATOLY MAKHOV



"FOUR-HEADED WITH SCISSORS" BY EXPATRIATE OLEG TSELKOV



Smart Money

FUSION OR NOT, PALLADIUM'S HOT

Until recently, few people had ever heard of it—a grayish metal used in making semiconductors and dental crowns. Then came the news about cold nuclear fusion (BW—May 8), and suddenly palladium, a key player in that process, became a hot metal. After the announcement, the price of palladium, which is in the platinum metals group, spiked 20% to an eight-year high of \$184 an ounce. It has since drifted down to about \$160.

Even before the fusion experiment, palladium was beginning to glow. Demand from its chief user, the electronics industry, is increasing—which should soon start squeezing supplies, says Jeffrey Christian of CPM Group, a metals consultant. Lately,

a sustained \$180—or even \$200, should the fusion outlook prove favorable.

That's the upbeat scenario, of course. A slump in the automotive or electronics industry could easily send prices tumbling. Fusion aside, palladium remains primarily an industrial metal, and a thinly traded one at that. Recently, on the New York Mercantile Exchange, the number of outstanding palladium contracts was only 9,599 vs. 20,444 for platinum and 160,613 for gold.

Palladium can be expensive for individuals to buy. Brokers typically deal in 100-ounce contracts. Obtaining smaller quantities is harder, since most metal dealers, when they stock palladium at all, carry industrial 100-ounce bars. But some are beginning to accommodate investors. Monex International, a dealer in Newport Beach, Calif., just started offering 50-ounce minimum purchases of palladium in 1-, 5-, and 10-ounce bars at a 2.5% commission over the spot metal price.

CUDDLY COINS. Several government mints have recently issued commemorative palladium coins. Although primarily collectors' items (and burdened with hefty premiums), these products do reflect the metal's performance: One popular medal, the 1-ounce Chinese Panda, has risen to \$305 from \$250 in December.

Since palladium is usually mined as a by-product of platinum, another strategy would be to buy shares of platinum companies, says Patrick Magilligan, a Merrill Lynch equities analyst. The big two are Impala Platinum Holdings and Rustenburg Platinum Holding. Both are South African—and both are up some 20% since the fusion news exploded. *Troy Segal*

PALLADIUM'S PROGRESS



palladium has also benefited from rumors that it would replace platinum as the chief ingredient in automotive catalytic converters. "The market has been revitalized," says Ted Arnold, metals specialist for Merrill Lynch in London. "The fusion news just added sex appeal."

Right now, though, the metal may be too hot to handle. Arnold advises investors to wait for prices to drop to \$150 before buying. Palladium has the potential in the next nine months to trade at



Computers

LOGGING ON FROM LAGOS TO LIMA

Let's say you've mastered the art of hooking up your laptop computer to hotel phone lines. The messages you sent from Detroit and the West Coast reached headquarters without a glitch, and electronic mail flowed smoothly into your laptop. But now they're sending you to Mexico, or perhaps Egypt, for a week. Will your laptop perform on foreign phones?

Yes, but not without a struggle. In the U.S., most phones snap in and out of wall jacks. With a computer hookup wire, it's easy to snap the computer into the phone line. But many phones in the developing world are still hard-wired, as U.S. phones were 20 years ago. The solution: Carry along a Phillips screwdriver, a penknife, and a modified hookup wire—a primitive but effective means of circumventing the hard wiring.

PHONE SURGERY. The doctored cable is simply cut open, and two alligator clips are attached to the two wires inside. (Stateside electronics shops will usually do this for a small charge.) You unscrew the phone's mouthpiece, remove the microphone, and attach the clips to the two prongs beneath it.

But suppose your phone doesn't have an unscrewable

mouthpiece? The Third World is teeming with such phones. Here, travelers might try a fashioned acoustic couple—a pair of muffs that end the mouthpiece and ear of the telephone's receiver. These work if you can fit phone with round earpiece and mouthpieces. But not of the same phones that unscrew also have square mouthpieces. In this case, you might have to ask the hotel operator for a different phone, or look for other options.

Assuming you have successfully hooked up your phone, you probably can't talk direct to your stateside computer. Chances are you'll have to go through an operator who can send you the message while the phone is ringing. And you might also warn the operator or him that you will be unable to acknowledge that you're there. It's very frustrating to have the computer beep at the mouthpiece in your room and an operator saying: "Buenos días, Señor, are you there?"

Even if you do everything right, telecomputing from the developing world is an iffy endeavor. Static and noise on the line can interfere with transmissions, so try to pick hotels that offer fax and telex services and send test messages to make sure their machines are working. *Stephen B...*

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Tax Tips

WHEN AN S CORP MAY SPELL TAX RELIEF

Small business owners are a blessed lot under tax reform. While the 1986 tax law closed a vast array of favored loopholes, it left a major one for owners of closely held companies: S corporation status. Small businesses set up as traditional corporations have converted in droves into S corps, which are taxed like partnerships, thus eliminating corporate-level taxation. And the tax status is especially attractive for startups.

One reason for the allure of S corp status is lower individual tax rates. For the first time ever, corporate tax rates, which peak at 39%, exceed the highest individual tax bracket, currently 33%. In the past, when corporate rates were lower than individual rates, it made sense to retain earnings in the company. But now it's smarter to switch to an S corp and funnel earnings straight through to the owners.

QUICK CHANGE. A construction equipment-leasing company outside Washington, D.C., for instance, decided after 34 years as a regular corporation to switch to S status in 1987. "We couldn't afford not to make the change," says the treasurer. "Corporate rates are more stringent, and they are more likely to increase than individuals' rates."

Many of the more recent conversions were timed to beat new rules that take a little bit of the bloom off the S corp rose. New regulations that kick in fully this year impose a corporate-level tax on

certain asset sales after the switch. If a corporation elects to convert and sells assets within a 10-year period, it will have to pay taxes on the "built-in gain," or the difference between the original cost of the asset and its fair-market value on the date of conversion. "Most companies will still benefit from the S election, but it's not the nice, easy move it used to be," says David Boyle of accounting firm Ernst & Whinney.

The new rules may reshape thinking of entrepreneurs considering a startup. "In the past, it was normal to start as a C corporation and look at the S," says Robert Franco of Price Waterhouse. "Now, closely held corporations presumably should start as S companies, and then look at why they should not be S."

Companies expecting either losses or substantial income

will benefit the most from S status. A regular corporation would be unable to use the losses against income until it started making money itself. If a startup runs in the red in its first few years, a pro rata share of the losses may be taken immediately on the personal tax returns of the com-

pany's owners, providing a shelter for other income. But the shareholder may do this only if he shows that he has a "material" role in the business—by spending more than 500 hours a year on it, for example. If he is merely a so-called passive investor, he

may write off the loss against income from other passive activities, like real estate.

BREAKEVEN POINT. Companies with booming earnings will also benefit from the lower tax rates that accompany S status. Ken Patry of Deloitte, Haskins & Sells advises firms expecting at least \$152,272 in earnings to take S status, since that's the breakeven point at which the corporate tax bill starts to exceed the individual's tax liability.

The S route isn't for everyone. S corporations are subject to certain restrictions. For example, they are not allowed to have wholly owned subsidiaries, more than 35 shareholders, or more than one class of stock. So your company may eventually require a more complicated structure, you might want to stick with the traditional route.

Catherine M.

Startups particularly favor S status, which lets them be taxed like partnerships

Worth Noting

■ **JUNK IT.** Deluged by solicitations? Send your full address and all variations of your name (Mrs. John Doe, Jane R. Doe, etc.) to Mail Preference Service, Direct

Marketing Assn., 6 E. 43rd St., New York, N.Y. 10017. In four to six months, you'll join 800,000 others deleted from mailing lists by businesses looking to cut costs.

■ **GLOBAL GAINS.** After May 12, investors can trade options and futures on the In-

ternational Market Index. The dollar-based IMI tracks some 50 foreign blue-chips: Sony, Jaguar, Royal Dutch/Shell Group, and others. Options trade on the Amex, futures on the Coffee, Sugar, & Cocoa Exchange.

■ **SPLIT SCREEN.** Panasonic's

PV-535 camcorder can show you two scenes at once: a panoramic view of a commencement exercise, for example, with a closeup of the graduate's face. The second image fills a corner of the main picture. In stores this summer, it's \$1,700.



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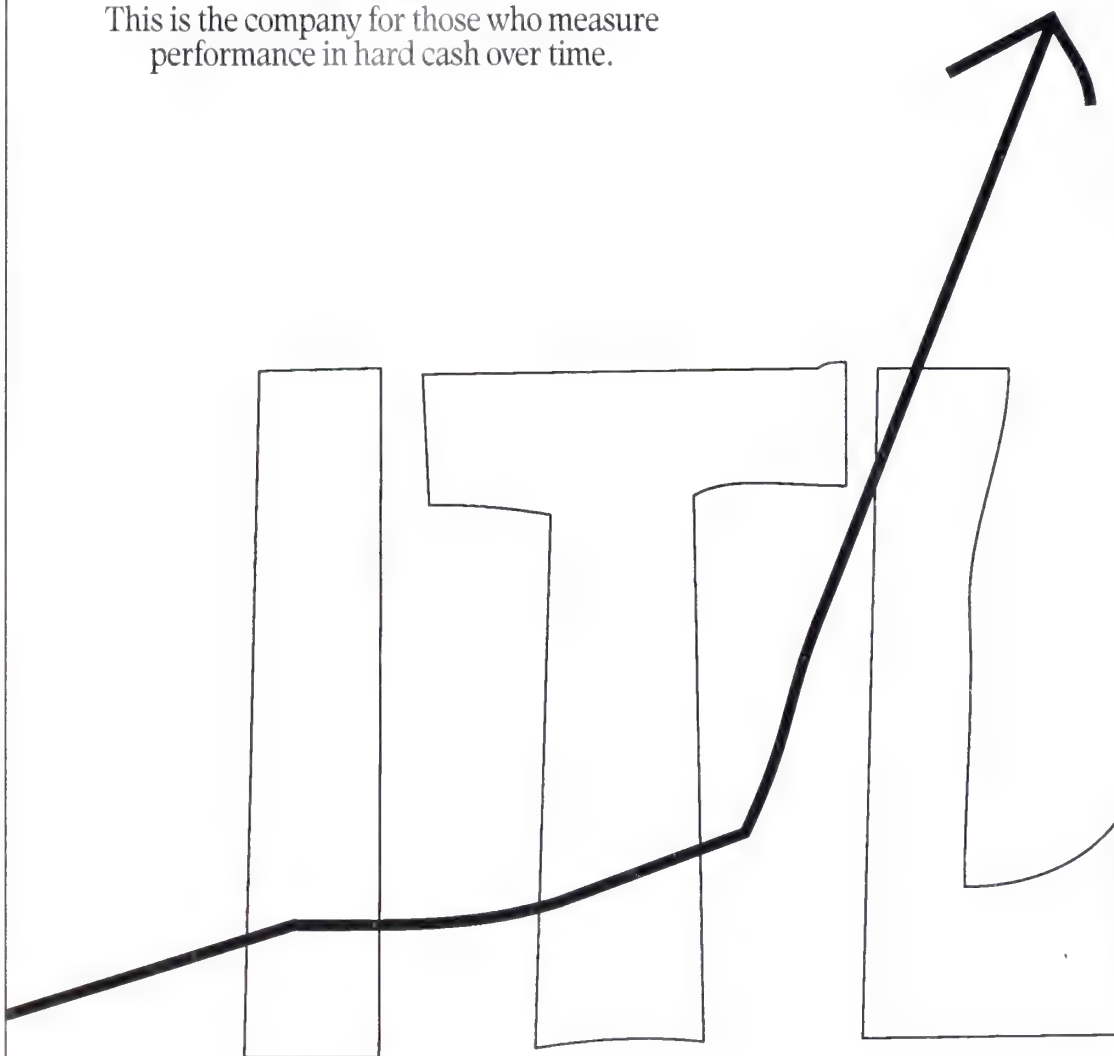
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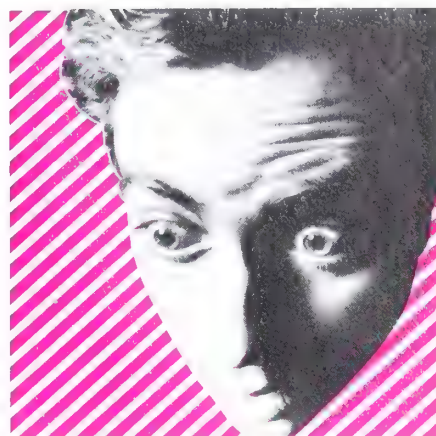
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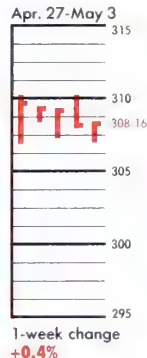
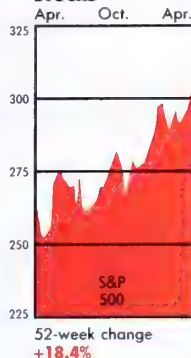
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Investment Figures of the Week

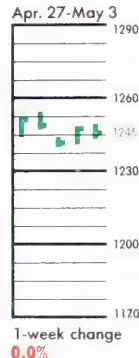
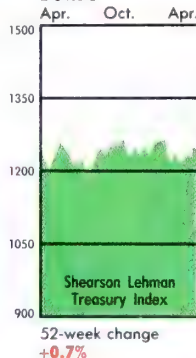
MARKET COMMENTARY

retreated from their 18-month highs as investors decided to take some profits. Still, for the most part, the Dow industrials managed to show a slight gain, while broader indexes did even better. Overseas, the Tokyo market set new highs. Despite the retreat in the purchasing manager index of business activity, prices held firm and short-term rates were steady. Gold prices were weak, and, not surprisingly, gold mining stocks continue to outperform the market badly.

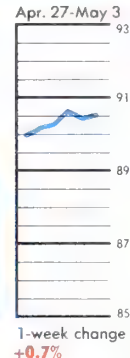
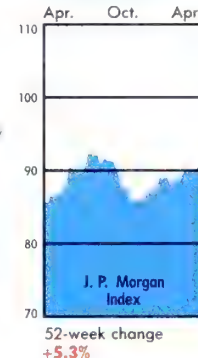
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	% change	
		Week	52-week
STOCKS			
DOW JONES INDUSTRIALS	2393.7	0.2	17.6
COMPANIES (Russell 1000)	163.1	0.6	18.2
COMPANIES (Russell 2000)	164.8	0.7	13.5
COMPANIES (Russell 3000)	175.2	0.6	17.8

	Latest	% change (local currency)	
		Week	52-week
FOREIGN STOCKS			
DOW JONES (FINANCIAL TIMES 100)	2105.7	0.6	17.3
NIKKEI INDEX	33,955.0	1.6	22.7
TSE COMPOSITE	3588.8	0.3	7.6

	Latest	Week ago	Year ago
FUNDAMENTALS			
90-DAY TREASURY BILL YIELD	8.8%	8.8%	6.3%
30-YEAR TREASURY BOND YIELD	9.0%	9.0%	9.1%
S&P 500 DIVIDEND YIELD	3.4%	3.4%	3.4%
S&P 500 PRICE/EARNINGS RATIO	12.1	12.0	13.9

	Latest	Week ago	Reading
TECHNICAL INDICATORS			
S&P 500 26-week moving average	287.2	286.1	Positive
Stocks above 26-week moving average	65.7%	64.6%	Neutral
Speculative sentiment: Put/call ratio	0.20	0.21	Negative
Insider sentiment: Vickers sell/buy ratio	1.43	1.42	Positive

INDUSTRY GROUPS

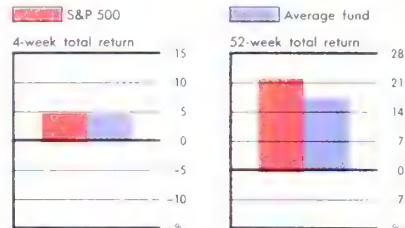
BRIDGE INFORMATION SYSTEMS INC.

WEEK LEADERS	% change		Strongest stock in group	% change		Price
	4-week	52-week		4-week	52-week	
BANKS AND LOANS	14.6	37.3	GOLDEN WEST FINANCIAL	17.1	56.3	42
REBUILDING	13.1	45.5	KAUFMAN & BROAD	18.1	27.3	12 1/4
COMMUNICATIONS EQUIPMENT	12.6	0.8	NORTHERN TELECOM	15.0	-4.2	17 1/4
PHARMACEUTICALS	12.5	7.9	AVON	38.2	37.4	32 1/8
AGRICULTURE	9.8	-7.8	PERKIN ELMER	13.1	-0.5	24 3/4
WEEK LAGGARDS	% change		Weakest stock in group	% change		Price
	4-week	52-week		4-week	52-week	
MANUFACTURED HOUSING	-12.8	17.8	FLEETWOOD ENTERPRISES	-15.0	15.7	24 7/8
MINING	-4.9	-3.2	PLACER DOME	-6.5	-6.5	12 1/2
INSURANCE BROKERS	-2.7	18.2	ALEXANDER & ALEXANDER	-5.2	12.4	24 7/8
REAL ESTATE INVESTMENT TRUSTS	-2.7	-9.0	LOMAS & NETTLETON	-17.7	-34.8	14 1/2
VEHICLES	-2.6	4.7	CHRYSLER	-5.5	3.3	23 3/4

MUTUAL FUNDS

MORNINGSTAR INC.

	%		%
WEEKLY RETURNS		LAGGARDS	
4-week total return		4-week total return	
SELECT COMPANIES	11.3	STRATEGIC GOLD/MINERALS	-8.2
EMERGING GROWTH	11.2	FINANCIAL STRATEGIC GOLD	-5.9
CENTURY GIFT TRUST INVESTORS	10.5	STRATEGIC INVESTMENTS	-5.5
52-WEEK RETURNS		52-week total return	
SELECT COMPANIES	66.3	STRATEGIC GOLD/MINERALS	-26.7
AERIAL AVIATION & TECHNOLOGY	42.2	STRATEGIC INVESTMENTS	-16.9
UMBIA SPECIAL	40.6	SLH PRECIOUS METALS & MINERALS	-14.3



RELATIVE PORTFOLIOS

DATA RESOURCES INC.

Amounts invested at the present of \$10,000	Foreign stocks	U. S. stocks	Treasury bonds	Money market fund	Gold
1 year total return	\$12,341	\$12,030	\$11,080	\$10,670	\$8,349
1 year total return	+0.41%	+0.45%	+0.23%	+0.16%	-1.59%

on this page are as of market close Wednesday, May 3, 1989, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close

May 2. Mutual fund returns are as of Apr. 28. Relative portfolios are valued as of May 2. A more detailed explanation of this page is available on request.

WASHINGTON HAS TUNNEL VISION ON NATO

The U.S.-led NATO alliance is on a collision course with its second most powerful member, West Germany. Bonn wants to negotiate with Moscow to reduce the thousands of short-range nuclear missiles stationed by NATO and the Soviet-led Warsaw Pact in Central Europe. The Bush Administration opposes such a move, arguing that removal of these weapons would leave Western Europe vulnerable to attack by Soviet non-nuclear forces.

The Administration must reconsider. It is amazing that German public opinion was for so long willing to accept a NATO defense strategy that would reduce Germany to a radioactive ruin.

There is a way out of this impasse. But it will require a broader vision of NATO's needs and goals than the White House has managed so far. NATO should open negotiations with the Soviets aimed at thinning out or even abolishing short-range nuclear weapons. But it should tie any final agreement to a successful outcome of the talks that began in Vienna on Mar. 6 on deep cuts in conventional forces in Europe. A basic aim of those talks is to restructure Warsaw Pact forces, converting their capabilities from offense to defense. The result would be a more stable and enduring peace in Europe than the present nuclear standoff.

What has blocked such an initiative so far is the persistence of Cold War stereotypes in Washington. Defense Secretary Richard B. Cheney, for one, recently said that he expects Mikhail S. Gorbachev to fail in his reforms and be replaced by a "far more hostile" Soviet leader. In fact, there are strong reasons to believe that profound changes in the Soviet Union are laying the basis for less belligerent East-West relations. A fundamental shift is under way toward a more open, decentralized, and pluralistic society. These changes will not easily be reversed, with or without Gorbachev. The result—along with deep problems of economic decline and resurgent nationalism—will be to impose continued restraint on the Kremlin's leaders. For the West, what the Soviet ferment has created is an opportunity that NATO should actively pursue: the chance to start winding down, after 40 years, the most dangerous military confrontation the world has ever seen.

LEST WE FORGET, ESOPs ARE FOR EMPLOYEES

The original congressional authors of employee stock-ownership plans in 1974 wanted to increase employee corporate ownership. But these days, companies are largely embracing ESOPs because they form an effective antitakeover defense—one that also lowers the cost of running a business.

The ESOP is becoming the hottest thing in corporate finance since the leveraged buyout. It is also one of the last

tax gimmicks around, one that Congress may tinker with but will not take away. The tax code offers companies generous breaks to encourage employee ownership—investives that, with the increasing use of ESOPs, could cost the Treasury several billion dollars a year. To name just a few, lenders can offer companies loans at cheaper rates because they can shelter 50% of their interest income on their loans from the tax man's grasp. For dividends paid on stock, double taxation of dividends is eliminated. Private owners don't have to pay capital gains if they sell 30% of their company to an ESOP and recycle the money into another U.S. industrial corporation.

What should Congress do about this trend? It should focus on making sure that employees own the stock and are treated just like any other stockholder, that genuine worker participation is involved, and that workers can vote on shares confidentially. ESOPs should be judged not by how successful they are as a defense against takeovers or by the \$400 million cost involved in tax giveaways. Rather, the standard should be whether these companies, in an internationally competitive environment, show higher productivity, growth, higher revenues, higher sales, and higher return on equity. If they do, the ESOP will have succeeded. If not, Congress should take another look.

NO HIDING PLACES FOR PUBLIC COMPANIES

Even if one is inured to the constant tales of investor suffering wrought by penny stocks and the broader market who bring them public, the story of Sequential Information Systems in New York City is so astonishing and nearly defy belief. Here is a company with 20,000 shareholders—rivaling the rosters of the largest industrial companies. And yet Sequential has behaved as if there are no shareholders at all, as if it was not beholden to its owners or to anyone (page 124).

Look at the public record—what there is of it. There has been no annual report and no annual meeting since 1986. Perhaps Sequential was only being modest. Or perhaps it felt that if it told its shareholders what was going on, they might ask questions—or call their lawyers. We don't know, but the company isn't saying.

But this much we do know, and it is a shame: Sequential's silence was legal. There is no federal law requiring public companies to send out annual reports to shareholders. The law does require companies to send annual reports to the Securities & Exchange Commission, which apparently doesn't lose its temper easily, even when that requirement is ignored, as it has been by Sequential. Most companies, of course, send out reports to shareholders anyway, even if they are losing money hand over fist. So those that don't oblige figure to be truly rotten eggs—penny-stock companies like Sequential, with shareholders who have suffered enough. Abuses by penny-stock companies will be deterred only when the executives of such companies are no longer allowed to hide from their shareholders—legally. There ought to be a law.

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FAST BUSI
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THE BATTLES RAGING OVER 'INTELLECTUAL

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BusinessWeek

MAY 22, 1989

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GROWTH **HOT** COMPANIES

Annual Ranking of
The 100 Best Small Corporations PAGE 20



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May 2, 1989

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and

Texas Stadium Corporation

have been acquired by

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The undersigned acted as financial advisor to the Dallas Cowboys Football Club, Ltd and Texas Stadium Corporation and assisted in the negotiations

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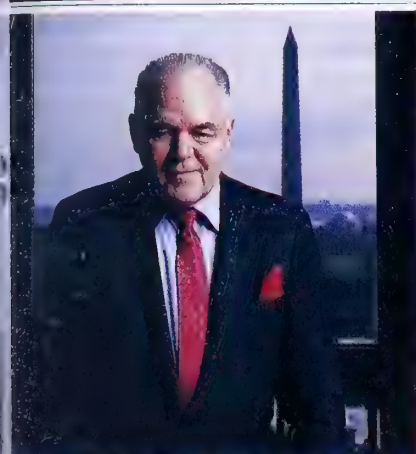
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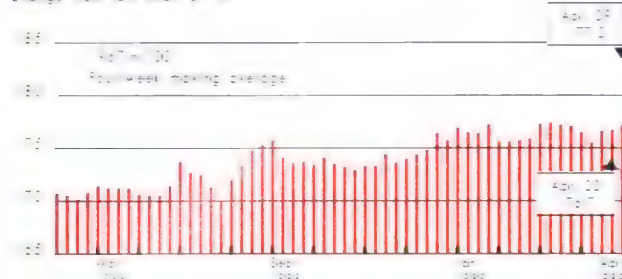
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BusinessWeek Index

PRODUCTION

Change from last week: 0.3%
Change from last year: 3.7%

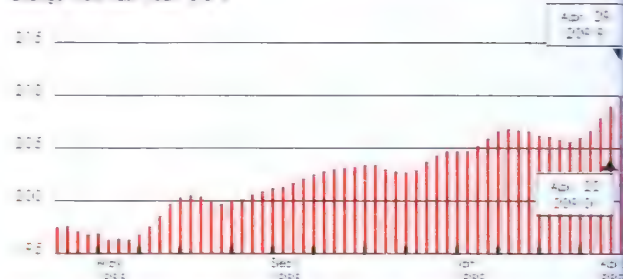


The production index increased for the week ended Apr. 29. On a seasonally adjusted basis, output of lumber, electric power, autos, food, and paper rose. Paperboard, trucks, and air freight traffic output declined. Production of steel and crude oil refining was unchanged for the week. Before calculation of the four-week moving average, the index jumped to 71.7 from 70.2 in April; the index rose to 70.7 from 70.1 in March.

BPI production index (1982=100) by Paul Davis/HPI Inc.

LEADING

Change from last week: 0.4%
Change from last year: 3.0%



The leading index was up slightly for the week ended Apr. 29. Higher stock prices, lower bond yields, and a drop in the number of business failures offset the negative effects of slower growth rates for real-estate loans, materials prices, and M2. Prior to calculation of the four-week moving average, the index also increased to 111.2 from 110.9 in the previous week. In April, the index advanced to 109.9 from March's level of 109.6.

Leading index (1982=100) by Center for International Business Cycle Research.

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (3 billion lb. shipments)	7,974	7,940	+0.3
AUTOS (3 million)	1,547,000	1,507,000	+2.6
TRUCKS (3 million)	877,000	877,000	0.0
ELECTRIC POWER (3 billion kilowatt-hours)	80,800	80,600	+0.2
CRUDE-OIL REFINING (3 million bbls/day)	10,160	10,078	+0.8
COAL (4.2 billion lb.)	18,667	18,149	+2.8
PAPERBOARD (4.2 billion lb.)	7,170	7,408	-3.3
PAPER (4.2 billion lb.)	7,560	7,520	+0.5
LUMBER (4.2 billion ft.)	478.9	490.7	-2.4
RAIL FREIGHT (4.2 billion ton-miles)	20.0	20.1	-0.5

Sources: American Iron & Steel Inst., World Automotive Report, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., Weyerhaeuser, SRA, Woodpulpers of America, Railroad.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (3 billion \$)	308.18	308.00	+0.06
CORPORATE BOND YIELD (Apr. 25)	9.75%	9.75%	0.00
INDUSTRIAL MATERIALS PRICES (3 billion \$)	106.0	106.8	-0.8
BUSINESS FAILURES (4,181)	220	243	-9.0
REAL ESTATE LOANS (4 billion \$)	\$201.8	\$201.3	+0.2
MONEY SUPPLY (M2) (4.2 billion \$)	\$2,093.8	\$2,093.0	+0.04
INITIAL CLAIMS UNEMPLOYMENT (4.2 million)	300	288	+4.2

Sources: Standard & Poor's, Moody's, Journal of Commerce Index, 1980=100. Dun & Bradstreet failures of large companies. Federal Reserve Board. Labor Dept. CBICP seasonally adjusted data on business failures and real-estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (Apr.)	107.0	106.0	+0.9
BUSINESS WEEK LEADING INDEX (Apr.)	109.9	106.0	+3.6
EMPLOYMENT CIVILIAN MILLIONS (Apr.)	117.1	117.1	0.0
UNEMPLOYMENT RATE CIVILIAN (Apr.)	6.8%	6.8%	-0.1

Sources: BLS, CBICP, BLS.

MONEY-MARKET RATES

	Latest week	Week ago	% Change year ago
MONEY SUPPLY (M1) (4.2 billion \$)	\$781.0	\$781.0	0.0
BANKS BUSINESS LOANS (4.2 billion \$)	\$14.5	\$14.0	+3.6
FREE RESERVES (3 billion \$)	7.8	7.8	0.0
NONFINANCIAL COMMERCIAL PAPER (4.2 billion \$)	118.0	118.0	0.0

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in billions of dollars).

MONEY-MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (3.5%)	9.75%	9.80%	7.00
PRIME (3.0%)	10.50	10.50	8.50
COMMERCIAL PAPER 3-MONTH (3.5%)	9.60	9.71	7.09
CERTIFICATES OF DEPOSIT 3-MONTH (3.5%)	9.60	9.60	7.00
EURODOLLAR 3-MONTH (3.0%)	9.80	9.80	7.00

Sources: Federal Reserve Board, First Boston.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (100)	1.6	1.6	1.6
GERMAN MARK (100)	1.0	1.0	1.0
BRITISH POUND (100)	1.7	1.6	1.8
FRENCH FRANC (100)	1.44	1.48	1.44
CANADIAN DOLLAR (100)	1.0	1.0	1.0
SWISS FRANC (100)	1.0	1.0	1.0
MEXICAN PESO (100)	1.44	1.44	1.44

Sources: Reuters, Foreign Bankers Association, expressed in U.S. dollars. Supply except for British pound expressed in pounds.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (1 ounce)	\$370.00	\$370.00	0.0
STEEL SCRAP (1 ton = 2,000 lb.)	1.50	1.50	0.0
FOODSTUFFS (1 million lb.)	103.0	104.0	-1.0
COPPER (3.5 million lb.)	14.0	14.0	0.0
ALUMINUM (3.5 million lb.)	14.0	14.0	0.0
WHEAT (3.5 million lb.)	4.80	4.80	0.0
COTTON (3.5 million lb.)	50.00	50.00	0.0

Sources: Commodity Research Bureau, Through Market, Commodity Research Bureau, Market News, United Fruit, Market News.

A few items in the production indicators are seasonal, and in computing the B.W. index, chain, other components, estimated and non-estimated, include machinery and defense equipment. Sources: Federal Reserve Board, BLS, CBICP, BLS, Dun & Bradstreet, SRA, Woodpulpers of America, Railroad.

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ARE PUBLIC LANDS BEING PRESERVED—OR POLISHED OFF?

How curious it is for BUSINESS WEEK to strike out against traditional multiple-use activities on federal lands in the West ("This land is whose land?" Government, Apr. 24). One may argue that federal lands are being abused, but such claims hardly hold a candle to urban sprawl, loss of agricultural cropland, and pollution on private lands in other regions of the country. We in Wyoming recognize the importance of good land stewardship. We would gladly challenge and invite the authors of the article to visit our fine state to see how traditional multiple-use activities, wildlife, and tourism can coexist.

William C. Schilling
Executive Director
Wyoming Heritage Society
Casper, Wyo.

Your article provides an inaccurate portrayal of the Mining Law of 1872. It refers to a recent General Accounting Office report that recommends revisions of the law. The GAO characterized the law as a "land grab" under which valuable public land is given away at "bargain-basement prices."

The Mining Law provides incentive for discovery of many of the minerals that have created the wealth and infrastructure of our nation. Under this law, any citizen or company is permitted to explore the vast public lands for hard-rock minerals. To actually gain title or "patent" to the land, it must be proven that the minerals can be mined and marketed at a profit. For the patents that are granted, strict laws regulate the development of mineral property and the environmental protection of the land.

Much has been made of the fact that land to be patented is purchased for \$2.50 or \$5 per acre, no matter what the actual value. What is not mentioned is that exploration for hard-rock mineral deposits is not just analogous to searching for a needle in a haystack—at times it is literally the equivalent of searching for an invisible needle.

To its credit, the Mining Law continues to achieve its purpose by providing

the incentive necessary to enlist private enterprise to invest millions of dollars annually in the high-risk venture of mineral exploration and development.

John A. Kneib
President
American Mining Congress
Washington

Your story on public-lands mismanagement amply illustrates how taxpayers are shortchanged every year both economically and environmentally by subsidized overdevelopment of the lands. As long as the U.S. Forest Service and Bureau of Land Management fail to enforce existing laws, these annual costs will continue.

However, the article scarcely touches on the much greater future costs of pairing the environmental damage now being done to our national forests around national parks—an environmental deficit we are accumulating through failure of stewardship. We need to look to the once-pristine waters of Prince William Sound in Alaska to be reminded of the magnitude of the kinds of costs.

George T. Frampton Jr.
President
Wilderness Society
Washington

BW'S PERSPECTIVE ON MILKEN WAS 20/20

Thanks for the editorial "Keep the Milken case in perspective" (Editorials, Apr. 17). It needed to be said, and you did it well.

Harold Simmons
Dallas

FENTANYL 'LOLLIPOPS' WON'T BE FOUND IN FAMILY MEDICINE CHESTS

Your recent article and cartoon about medicinal "lollipops" was misleading ("The FDA is a sucker for medicinal lollipops," In Business This Week, Apr. 17). Oral Transmucosal Fentanyl Citrate (OTFC), sometimes referred to as "fentanyl lollipop," is a highly controlled Schedule II drug prescribed only by physicians trained in its use and licensed by the DEA. It is not a medication that o

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would find in the family medicine chest. Moreover, OTFC does not resemble a child's lollipop and would not be mistaken for one under any circumstances.

Your article failed to mention that thousands of children do not receive an effective analgesic such as fentanyl prior to surgery or painful diagnostic procedures. The reason: Intravenous or intramuscular-injection techniques work against the goal of reducing anxiety and stress in children. OTFC administered by an anesthesiologist is a simple, humane way to ease the pain and stress suffered by children, and it adds to the safety of the surgery or procedure.

Brian Hague
Registered Pharmacist
Anesthesiology Dept.
The University of Utah
Salt Lake City

FURTHER DISPATCHES FROM THE ITT WARS

Your review ("A besieged chairman reports from the front," Books, May 1) of Rand V. Araskog's *The ITT Wars: A CEO Speaks Out on Takeovers* reports that the author "intimates" and "hints" that, as chief of ITT's public-rela-

tions division, I headed a cabal that sought to depose him and aid Jay Pritzker in taking over ITT. For 29 years I was a loyal ITT employee and, in fact, was instrumental in Mr. Araskog's rise to the company's helm. I denied the charges when his agents accused me (he chose not to make those charges to my face), and I deny them now.

Mr. Pritzker, as the media reported four years ago, was unknown to me and is unknown to me now. I did not resign from the company. I took early retirement at full pay and full pension—an outcome the company hardly would have permitted if it had any evidence at all that supported these allegations.

It is distressing that the "highly moralistic" Mr. Araskog would stoop to "intimations" and "hints" to add some "juicy stuff" to a book that is poorly written and exquisitely boring, to boot.

Edward J. Gerrity Jr.

President
Ned Gerrity & Associates Inc.
Port Chester, N. Y.

Contrary to the allusions made in your review, ITT was never a part in any way of AT&T.

About the closest connection ITT had

with AT&T was in 1925-26, when ITT bought from AT&T its international manufacturing operations.

Lyman B. Tucker
Boca Raton, Fla.

PAUL CRAIG ROBERTS' OWN AX GETS PLENTY OF GRINDING

Over the past year I have become increasingly disturbed by Paul Craig Roberts' articles in your otherwise fine publication. Someone has evidently suggested to Mr. Roberts that he turn every piece into a whining diatribe on how liberals have unfairly besmirched the reputation of his beloved supply-side economists and/or the Reagan Administration's economic policies. There is little, if any, new substance to each successive article. As of late, he has taken to simply criticizing the work of others without offering compelling support for his positions. "Don't hand out prizes for historical ax-grinding" (Economic Viewpoint, May 1) represents an all-time low.

I consider myself to be a moderate on the political-economics front, and I often agree with the positions that Mr. Roberts espouses. However, Mr. Roberts' relentless repetition is not going to bring

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any closer to his vantage point, nor will it expand or refine my base of knowledge—which, after all, is my intent in buying the magazine.

Daniel Springer
New York

Paul Craig Roberts' accusing other economics writers of "advancing ideological agendas and disregarding standards of scholarship" is the ultimate use of the pot calling the kettle the same color.

Tony Lima
Professor of Economics
California State University
Hayward, Calif.

PREDICTING THE QUICK DEMISE STEVE JOBS'S NEXT

Businessland thinks that Next [computers] will sell as well as its Compaqs ("Steve Jobs gets the keys to the PC market," Information Processors, Apr. 10). But the marketing agreement only ensures that Next will miss the real workstation market in engineering in favor of the "glamorous" business market.

Who will pay \$10,000 for a personal computer that won't run Lotus 1-2-3, Base, or Wordperfect any better than a

CORRECTIONS & CLARIFICATIONS

In the Top 1000 special issue, the list of the top 200 deals incorrectly stated that Nippon Mining Co. sold Gould's Industrial Automation Group to the AEG unit of Daimler-Benz. In fact, the transaction under which AEG acquired the Industrial Automation Group (now called Modicon Inc.) ended in June, 1988—well before Nippon bought Gould and while Gould was still a NYSE-listed company.

In "Look before you laugh at 'Chapter 11' investments" (Personal Business, Apr. 10) we incorrectly stated that the symbol preceding the name of a bankrupt company for both stock and bond listings is VI. The correct symbol is VJ.

\$3,000 machine? Nobody does that now.

Next is built of dreams, slick style, and media hype. How else could Jobs justify the cost of a useless, expensive magnesium cube while leaving out the \$100 floppy drive? It may take a year for the emperor's clothes to be revealed, but I predict that Next won't sell more than 5,000 machines before folding.

Arthur Hu
Mosaic Software
Cambridge, Mass.

WHY SAFEWAY SHOULD EXPECT LONG CHECKOUT LINES

Regarding "Safeway: It's confounding critics" (Marketing, Apr. 24): I invite Mr. Magowan to visit his Cherrydale (Arlington, Va.) store on the weekends. He should observe first-hand checkout lines so long that I've ceased shopping there.

One reason for the interminable waits is closed registers which are coupled with perpetual "Help Wanted" signs that offer only \$6 an hour. Today's *Washington Post* stated that the Census Bureau often gets no applicants at this rate.

BUSINESS WEEK correctly pointed out that Giant Food Inc. has been taking market share from Safeway. Paying below-market wages in a prosperous area such as Northern Virginia does not indicate that one is a strong competitor in one's industry.

David Barton
Arlington, Va.

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Books

SUMMER OF '49

By David Halberstam

William Morrow & Co. • 304pp • \$21.95

LOOKING BACK AT BASEBALL'S FINEST HOUR

Forty years ago, the American dream had a name: Joe DiMaggio. Each time the immigrant fisherman's son drove in a run or hid the pain of an injury as he glided around the bases, he seemed to be a living myth.

But Joltin' Joe was so tense that he suffered from ulcers and insomnia. He was so image-conscious that he had his Army uniforms tailored. He was so shy that he "led the league in room service," according to a teammate. And as a rookie, he was so green that when a writer asked him for a quote, DiMaggio thought he wanted a soft drink.

If David Halberstam's *Summer of '49* contained nothing but such close-ups of baseball greats, it would be must-reading for fans. But it contains much more. The Pulitzer prizewinning author of *The Best and the Brightest* and *The Reckoning* takes one season in baseball history and holds it up as a mirror of postwar America. In that mirror, a whole era gleams—and then some streaks appear.

The story at the heart of this remarkable book is the 1949 pennant race between the New York Yankees and the Boston Red Sox. On the final weekend of the season, the Red Sox arrived at Yankee Stadium holding a one-game lead, after being 12 games out of first in mid-July. But Casey Stengel's Yankees swept the last two games and captured the American League flag. The Yankees went on to win the first of a record five straight World Series.

Why does this particular season loom so large for Halberstam? Because, he says, "in the years immediately following World War II, professional baseball mesmerized the American people as it never had before and never would again." The returning athletes symbolized the renewal of a way of life that the war had put on hold. They played to

huge, devoted crowds of fun-starved fans. And the heroes of the 1949 pennant race—DiMaggio, Ted Williams, Tommy Henrich, Bobby Doerr—could be heroic without risking death.

But the 1949 season was also the



JOLTIN' JOE: THE FUTURE HALL-OF-FAMER WAS TENSE, INSECURE, AND SHY

swan song of baseball's age of innocence. Most games were played in daylight—and none on AstroTurf. If you couldn't get to them, you heard them on the radio. Owners had more clout than players, and salaries were minuscule by today's standards. The long train rides between baseball cities, when colleagues passed the time playing cards and word games, nurtured team spirit as plane hops cannot. Sportswriters protected the reputations of their idols, keeping their sexual secrets and carrying drunk players back to their hotels rather than let

them be seen staggering through the streets.

Then came a painful transition for the national pastime. Television emerged as the hot new medium, permanently changing the economics of sports. The balance of power shifted toward players, whose paychecks swelled. The race barrier crumbled and black perstars emerged, Halberstam argues. Teams that balked at signing them—including both the Yankees and the Red Sox—missed out on tremendous talent. And just as the next generation of journalists would expose the debacles of Vietnam and Watergate, sportswriters

would pull the wraps off baseball legends, airing their off-the-field activities and making them a harder to worship.

Halberstam wisely avoids harping on the cosmic implications of baseball's season of innocence. Instead, he's busy with play-by-play descriptions of the riveting national games and intimate sketches of the key personalities. His tales of Ted Williams, whom Halberstam calls "the real Joe Wayne," go a long way toward softening Williams' crusty image. Yogi is abundant, including some involving celebrities outside baseball: When New York saloon keeper Toots Shor introduced Ernest Hemingway to Berra as "an important writer," Berra muttered, "A writer, huh? What paper you with, Yogi?" Then there is Mickey Mantle meeting music and lifelong Yankee fan Paul Simon, who wrote the memorable lyric: "Where have you gone, Joe DiMaggio?" "Hey," said Mantle, "why didn't you write that song about me?" Simon replied that the syllables of

Mantle's name just didn't fit.

Halberstam doesn't quite pitch a perfect game. His nostalgia sometimes verges on corniness. And he occasionally waxes as enthusiastic about journalists as he does about ballplayers, forgetting that readers may not share his professional bias.

But chiding Halberstam for these rrors is like criticizing Williams, arguably the greatest hitter of all time, for less-than-brilliant fielding. I never saw DiMaggio play except on film, and my love of baseball is marred by my hatred of



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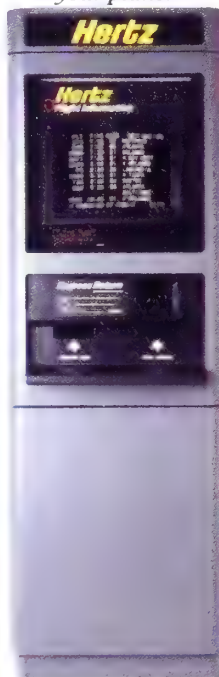
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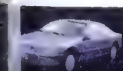


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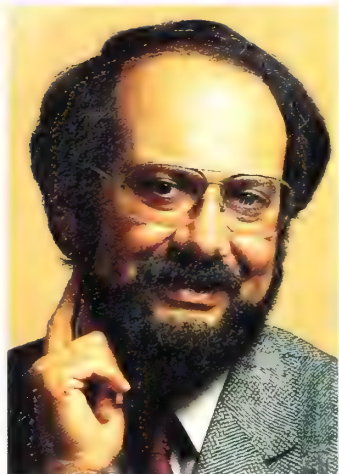
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WHY SCRAP A STEEL POLICY THAT WORKS?

BY ROBERT KUTTNER



Even though it violates all free-market rules, the 1984 program limiting imports has made the U.S. steel industry shine again. The Bush Administration should swallow its principles and renegotiate

The Bush Administration is weighing whether to extend the so-called Voluntary Restraint Agreement program in steel, which expires on Sept. 30. VRAs currently limit imports of steel to about 20% of the total U.S. market. We will soon get a familiar lecture from laissez-faire crusaders pointing out that the U.S. steel industry is now profitable, that it no longer needs protection, that American steelworkers are overpaid, and that by free-market principles we should buy our steel from whoever makes it most cheaply. If foreigners are dumb enough to subsidize their steel, America should accept the gift.

This all seems to make sense, until one grasps that the global steel industry does not play by the rules of the free market. For better or worse, most advanced industrial nations find it in their national interest to make steel—whether to develop experience in advanced production, to assure supply, or merely for prestige. As new entrants joined the steelmakers' club in the 1970s, established producers responded by redoubling investment in more efficient plants, adding to world overcapacity.

Since the late 1970s, every major steel-producing nation has continued to subsidize steel, and none other is a net steel importer. The European Community alone has spent about \$35 billion on steel subsidies over the past decade. Because of the staggering cost of allowing mills to sit idle, producers have a huge incentive to dump excess steel—guess where?

WRONG RULES. The U.S., the only major producer willing to take imports, initially responded as if other nations were playing by the rules of Adam Smith. The Carter Administration concocted a "trigger-price mechanism" intended to allow imports at a "fair" price reflecting the true costs of the world's most efficient (read Japanese) producers. But European producers dumped steel in the U.S. at the Japanese price, and the oversupply crisis worsened.

As the only competitors playing by free-market rules, U.S. steel producers suddenly faced staggering losses. They closed down plants, idled workers, and extracted pay cuts, reducing their production from a peak of 137 million tons in 1973 to just 77 million a decade later. Had this pattern continued, foreign subsidized steel would have all but obliterated U.S. steelmaking. Finally, in 1984, Congress and the Reagan Administration devised a quota program, holding imports to about 20% of the U.S. market. As the world's principal sponsor of free trade, our government awkwardly disguised this as a system of "voluntary" restraints. Thanks to this quota program, the American steel industry,

after losing a sickening \$11.6 billion from 1982 to 1986, turned profitable again in 1987, earning about \$1 billion. It earned about \$2 billion in 1988 and anticipates about the same in 1989.

What we have here, gentle reader, is an industrial policy for steel. The conservative Reagan Administration put aside its ideological qualms and concluded that retaining domestic steelmaking was in the national interest. It even went so far as to allocate capital investment—an even more grievous sin—when it required that profits generated by the import restraints be reinvested in steel modernization, rather than follow free-market paths to higher-yield investments such as oil companies.

NO FOOLS. Most shocking of all, this industrial policy has been a success. For the first time in a decade, the prospect of assured markets made it rational for steelmakers to reinvest. During each year of the VRA program, reinvestment exceeded net earnings. Today, American industry produces steel at an average price about \$130 a ton cheaper than Japanese steel. And contrary to prediction, the import restraint has not led to runaway inflation. Steel prices have lagged behind the consumer price index by about 20%. Price gouging is limited by competition from minimills in some product lines. A "short supply" provision allows quotas to be waived when steel customers are unable to get products from domestic suppliers. And though steelmakers are indeed an oligopoly, they are no fools. Price hikes would be the wrong signal to send Congress. VRAs have engendered prudent restraint.

Like it or not, the rest of the world does not consider laissez-faire a suitable crucible for the steel business. But this has not prevented enormous increases in productivity from occurring under mercantilist auspices. Accepting foreign subsidized steel is no bargain when foreign cartels are driving us out of the business. Cartels are also very adept at gouging, once customers are captive.

If we can't persuade the rest of the world to let Adam Smith dictate steel production, it would be far better to negotiate an agreement acknowledging that everyone is somewhat mercantilist. Some balance could be achieved by limiting worldwide subsidies and requiring those nations seeking a shot at our import market to open their own domestic markets to a comparable degree. The "first best" of perfectly free trade in steel is a delusion. The Administration should extend the VRA program, fine-tune it, and use it as a lever to negotiate a reasonable second best, where steel-producing nations at least play by reciprocal rules.

ROBERT KUTTNER IS ECONOMICS
CORRESPONDENT FOR THE NEW REPUBLIC
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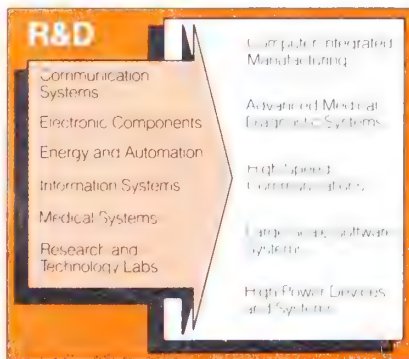
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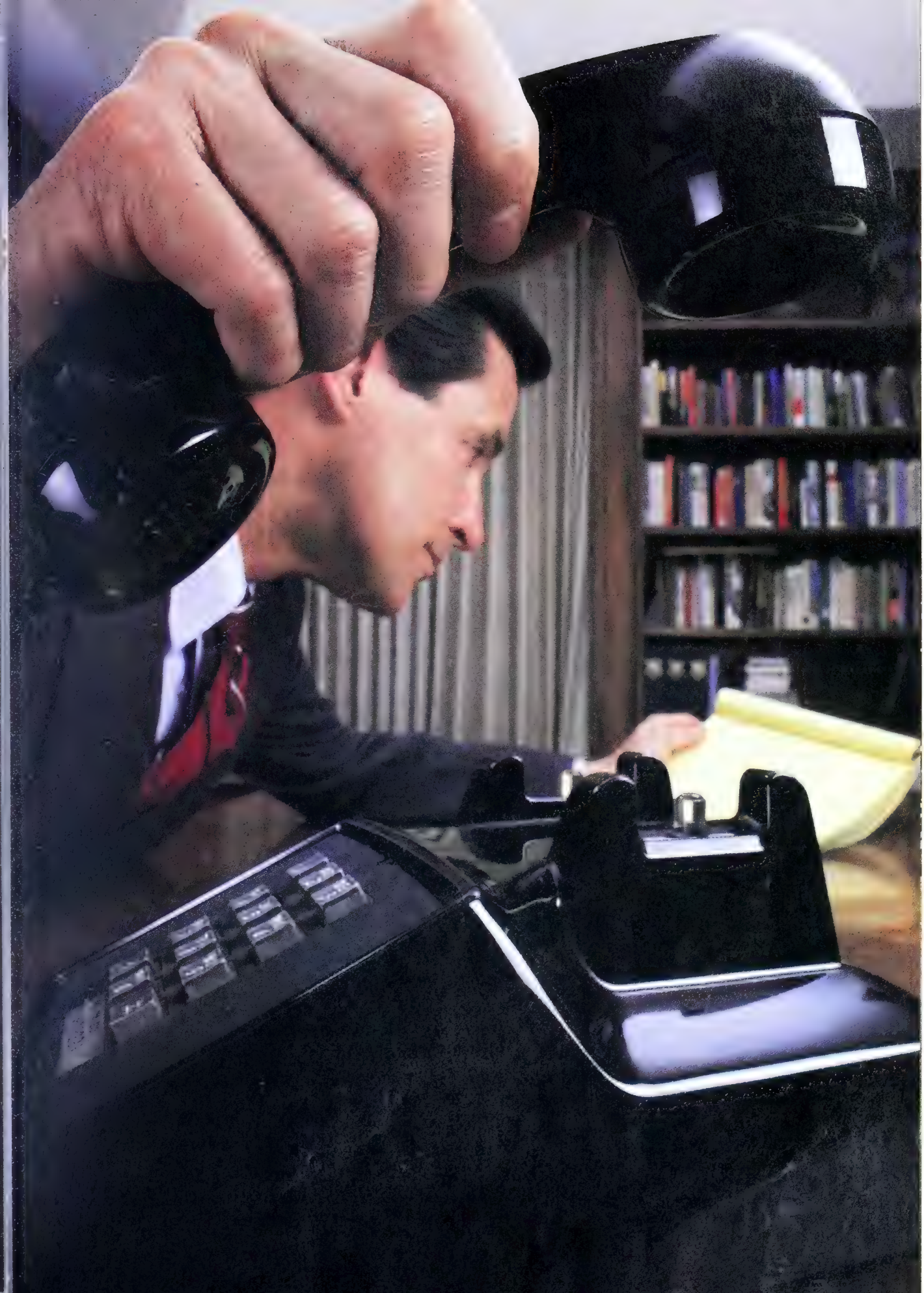
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PRODUCTIVITY IN SERVICES IS NOT A PROBLEM ABROAD . . .

Can badly lagging productivity growth in the expanding services sector be revived? The answer, according to economist Roger Fulton of A. Gary Shilling & Co., is yes. Fulton points to the track records of America's trading partners in Europe and Japan as proof that poor productivity growth is not intrinsic to service sectors in advanced industrial nations.

Although almost all sectors of the U.S. economy participated in a general productivity slowdown that began around 1973, the manufacturing sector has regained its earlier vigor—rising at an average annual rate of about 3.5% in the current decade. Services productivity, on the other hand, has continued to advance at a snail's pace of about half a percent a year since 1979.

Fulton notes that services have been the source of virtually all new job

growth is inherent in the services sector. But Fulton's analysis of international productivity trends in services shows that since 1973, the U.S. has been badly outperformed by other industrial nations (chart). And the situation is getting worse. "From 1979 to 1986," says Fulton, "services output per person in Japan, West Germany, France, Sweden, and Britain rose about 2% a year, compared with only 0.4% in the U.S."

Looking ahead, Fulton believes that services companies will be under increasing pressure to improve productivity—particularly from manufacturing companies seeking additional ways to cut costs. "Fortunately," he says, "the performance of other economies suggests that U.S. services productivity growth can be substantially increased."

. . . AND HIGHER WAGES COULD SPUR ITS GROWTH IN THE U.S.

The faster growth of services productivity overseas is no accident, contends a new Economic Policy Institute report by economist Lester C. Thurow of the Massachusetts Institute of Technology. Thurow notes that service sectors in Japan and Europe have invested heavily in new technology, with capital per worker growing twice as fast in Germany and Japan as in the U.S.

Such investment, claims Thurow, has been spurred by the high level and relative inflexibility of service wages overseas. While U.S. private service workers are paid only 67% of manufacturing wages, in Japan they receive 93% as much and in Germany 85% as much. High foreign wage levels are partly the result of stronger unions and of social legislation such as relatively high minimum wages and unemployment benefits.

In the U.S., low wage levels and fast labor-force growth in recent decades allowed service companies to meet rising demand for services by hiring more workers—producing the huge rise in employment that Americans boast about. But the price, notes Thurow, was stagnant productivity growth and a proliferation of low-wage jobs. In contrast, "Europe paid for its higher services wages and productivity with higher unemployment."

Although slowing U.S. labor force growth suggests that service industries will now concentrate on boosting productivity, that's not a foregone conclusion. Thurow believes that demand for services will also slow considerably. Such developments as the surge in restaurants and longer shopping hours to ac-

commodate the advent of working women have reached their limits, he says. Similarly, the explosive growth in financial services in response to deregulation and the creation of a world capital market is largely over, and rising health care spending faces growing resistance.

Thus, a crucial question for the economy, says Thurow, is whether business and national leaders should seek to maintain the low-wage structure in many service industries or promote higher wages. "If foreign experience is a guide," he says, "higher wages might be self-justifying by leading to more capital investment and productivity gains."

FRESH EVIDENCE THAT IRAs ENCOURAGE PEOPLE TO SAVE

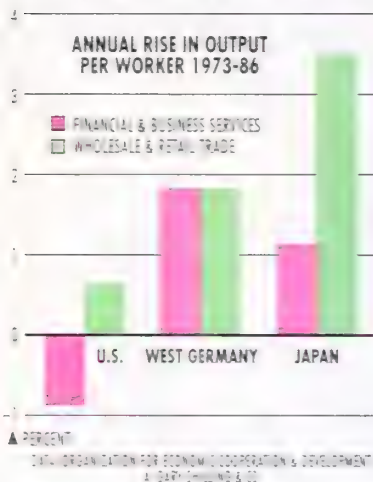
Did the surge in Individual Retirement Accounts after the rules were loosened by the 1981 tax reform mainly reflect a shifting of savings into IRAs, as some experts claim? Daniel Feenberg and Jonathan Skinner of the National Bureau of Economic Research theorized that if the "shifting" explanation were true, taxpayers should have experienced slowing growth in their taxable interest and dividend income if they moved assets into nontaxable IRAs.

Instead, the two economists found that families who set up IRAs after 1981 actually showed more growth in taxable dividend and interest income between 1980 and 1984 than families with similar initial asset income who didn't purchase IRAs. The findings suggest that IRAs may indeed encourage people to save more than they would have otherwise.

JOB GROWTH IS FITTING IN NICELY WITH THE FED'S BIG PICTURE

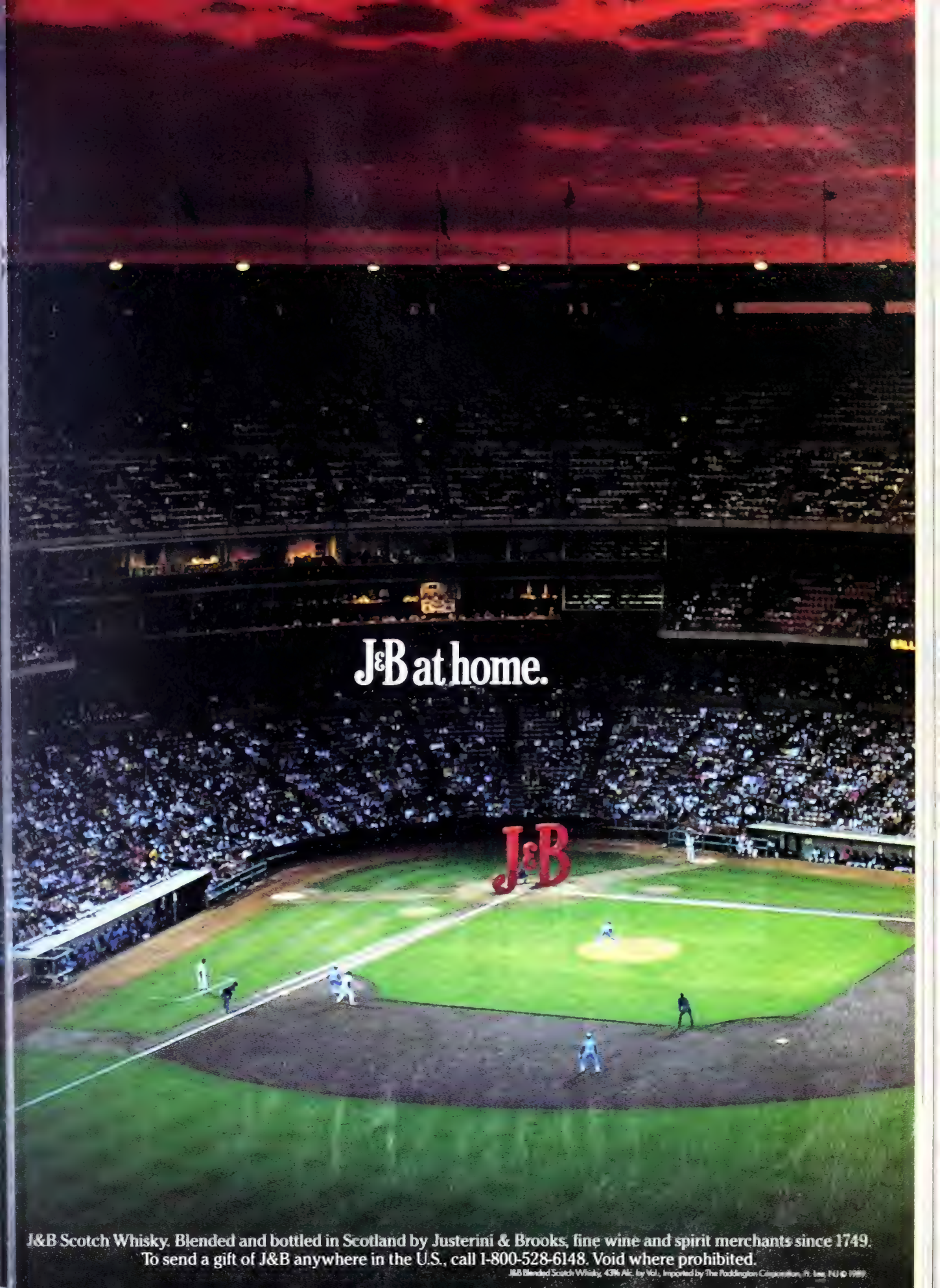
The Federal Reserve Board doesn't target employment growth directly, but it should be happy with the late numbers, says economist Nicholas Perrini of Connecticut National Bank. Factoring in 0.5% annual growth in productivity (the actual first-quarter pace), he calculates that monthly job gains of 135,000 to 170,000 are in keeping with the Fed's goal of slowing economic growth to 2% to 2½% pace. In March and April payroll employment increases averaged 145,000—and would have averaged 155,000 were it not for the Eastern Airlines strike. In short, the labor market are finally behaving in a way that's consistent with the Fed's goals, says Perrini.

PRODUCTIVITY IN SERVICE JOBS: FASTER GROWTH OVERSEAS



growth in the U.S. and that service-producing industries now account for more than 70% of private employment. Thus, higher services productivity is clearly the key to securing a rising national standard of living. Moreover, it's a critical factor in improving the nation's competitiveness and shrinking the trade deficit. Fulton estimates that services purchased by U.S. manufacturers now account for about 30% of manufacturing costs—the same share as direct labor.

That's why the experience of America's competitors is so significant. Many observers believe slow productivity

A high-angle, wide shot of a baseball stadium at night. The stadium is filled with a large crowd of spectators. The field is brightly lit, and a large, three-dimensional red "J&B" logo is positioned in the center of the infield. Several players in white uniforms are visible on the field. The sky above the stadium is dark with some clouds.

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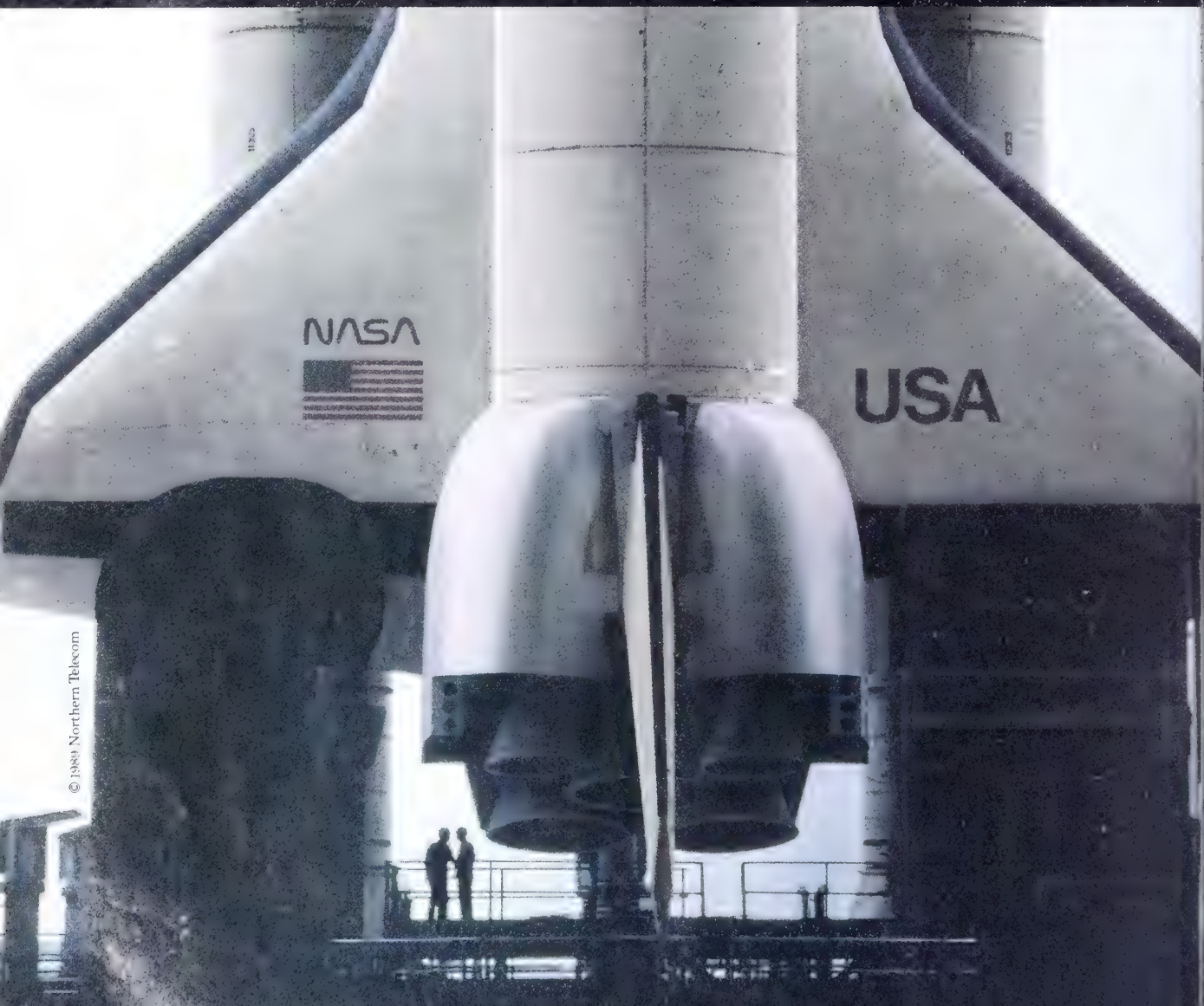
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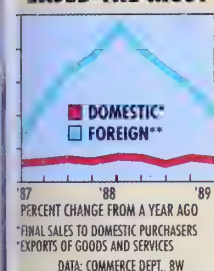
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THE LITTLE CHILL BLOWING THROUGH THE JOB MARKET

Now there are new signs that economic growth was moderating as the second quarter began. The latest evidence: the job market. Employment growth in April slowed for the third consecutive month, and the jobless rate jumped to 5.3%, reversing its February and March declines—and then some.

The job data are one more signal that the Federal Reserve Board's year-long effort to cool the economy and relieve inflationary pressures is starting to pay off—at maybe not the way the Fed had in mind.

WHERE DEMAND HAS EASED THE MOST



The Fed's goal has been to slow domestic demand by tightening credit. But so far, Fed restraint has hit foreign demand a lot harder (chart). Export growth has slowed sharply, in part because higher interest rates have strengthened the dollar, reducing U.S. competitiveness. The dollar hit a nine-month high against the West German mark on May 9.

The result: Continued strength in domestic spending by consumers and businesses is likely to propel the economy this quarter at close to the 3% drought-adjusted pace of the first quarter. And that won't constitute enough of a slowdown to keep inflation in check.

Sure, consumer buying slowed sharply last quarter, and housing is suffering from higher interest rates. Housing will certainly be a drag on the second quarter, but consumer spending is likely to bounce back. That's because income growth is robust, and buyers show no tendency to curtail credit purchases. Capital spending, very strong last quarter, will likely post another solid gain in this quarter.

EXPORTS HAVE FELT THE FED'S GRIP

Since the Fed began tightening in the second quarter of last year, domestic demand, excluding the volatile effects of the government's Commodity Credit Corporation, has grown at 2.5% annual rate. That's not much different from its 4% pace during the previous three quarters.

Exports, however, have slowed sharply (page 37). Real exports of goods rose at an 8.2% annual rate during the first three quarters, down dramatically from a 22.3% growth pace during the previous three quarters.

Higher inflation in the U.S., relative to our trading partners, is further eroding American competitiveness by increasing the cost of U.S. exports even more. Real

exports of dollar-sensitive capital goods—some 42% of merchandise exports—fell last quarter for the first time in two years.

Burgeoning export growth—and the thrust it gave to the manufacturing sector—was the economy's driving force in 1987 and 1988. Now the economy is beginning to lose some of that kick, but that's not about to cut severely into overall economic growth.

The export boom boosted the goods-producing sector of the economy, and that's where the export slowdown will mainly be felt. Slower growth of output and employment in manufacturing is already beginning to dampen gains in industrial production and nonfarm jobs. But the economy's service sector continues to provide strength.

PRESSURE ON WAGES IS STILL GROWING

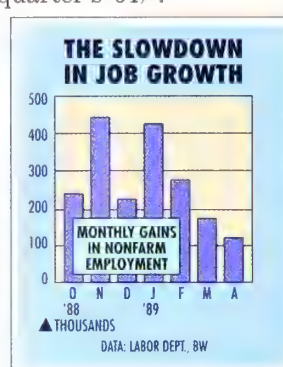
That was the pattern in April's employment report. Nonfarm industries added only 117,000 workers to their payrolls in the month, bringing total employment to 108.6 million. That was down quite a bit from increases of 171,000 in March, 276,000 in February, and 424,000 in January (chart).

Excluding strike periods, the April increase was the smallest in more than three years. Only 53% of the 349 industries in the Labor Dept.'s survey added workers to their payrolls, well below the first quarter's monthly average of 61% and the fourth quarter's 64%.

Jobs in the service-producing industries, some 76% of nonfarm employment, posted a small 112,000 increase in April after average monthly gains of 236,000 during the previous year. But job growth in services hasn't really slowed all that much. During the past year, employment in private service industries—excluding government—grew by 4%, about the same as the 4.1% pace during the previous year.

Not surprisingly, the sharpest slowdown in job growth has been in manufacturing. Factory employment fell by 9,000 in April, leaving it 15,000 below its January level. During the past year, factory jobs have grown only 1.6%, far below the 2.7% pace during the previous 12 months. Much of the weakness in recent months has been in lumber and electrical equipment.

But there are signs that nonfarm job growth is likely to pick up in coming months. Despite the slim employment gains in April, the month's workweek in the non-



Business Outlook

farm sector jumped 1.2%, to 35 hours. Labor says that reflects a distortion in seasonal adjustment caused by an unusually early Easter. Even so, the April rise was still one of the sharpest on record. That could be a signal of coming job strength as much as poor seasonal adjustment. In addition, initial claims for unemployment insurance continued to retreat in late April after rising during February and March.

Despite slower job growth in April and the rise in the unemployment rate, the inflation outlook hasn't improved. Wage pressures are still building. Hourly earnings in nonfarm industries jumped 0.7% in April. Monthly wage growth is volatile, but wages are still in an accelerating trend, up 3.9% from a year ago. And that doesn't include the rising cost of benefits.

Total compensation rose at a 5.7% annual rate last quarter, while nonfarm productivity made a slim 0.5% gain. That means that unit labor costs were up 5.2% last quarter. Thus, price inflation is not likely to move much below that pace. With wages still accelerating and productivity growth likely to remain poor—or worsen—expect further pressure on prices.

THE FED'S TIGHTNESS HASN'T HIT CREDIT USE

Job growth apparently remains brisk enough to keep consumer attitudes rosy. The Conference Board reported that consumer confidence remained high in April and that more consumers said jobs were "easy to get" than at any time in more than a decade.

That's one reason why consumers haven't let up on their use of credit. In March, installment debt grew by \$5.4 billion, the same rapid rate posted in February. The increase lifted installment debt outstanding to a record \$692.8 billion at the end of the first quarter. That works out to a hefty 18.6% of disposable income—an historically high level just short of the record 18.7% posted in early 1987.

Starting this year, the Federal Reserve has redefined

some components of installment credit, so comparison with past years are tricky. But the February and March data still indicate that credit use hasn't abated.

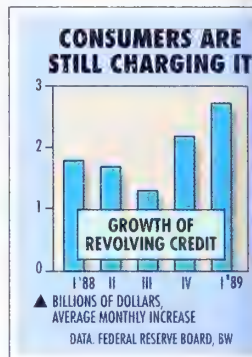
Revolving credit, which includes credit cards, is especially strong. In March, such debt advanced by \$4 billion. For the first quarter as a whole, revolving credit grew, on average, by \$2.7 billion per month—the fastest quarterly pace in more than a decade (chart).

This suggests that the Fed's tight monetary policy has yet to exert a broad influence on consumers' use of credit—beyond home buying and maybe car sales. One reason may be that interest rates on credit cards, which didn't fall as much as other rates did in the mid-1980s, haven't risen as much in the past year either.

The 17.83% average rate charged for credit card use in the first quarter isn't much different from the 17.8% financing rate of a year earlier or the 17.9% averaged in all of 1987. As a result, consumers aren't any more reluctant to use plastic to purchase products.

Weak car sales in March held down growth in auto loans. New-car financing grew by just \$953 million in March after increasing by a much healthier \$2.4 billion in February. In April, however, car sales bounced back in response to dealer incentives, which probably boosted auto loans. So overall credit growth in April no doubt continued its upward trend.

For now, the steady rise in credit doesn't seem to be more than consumers can handle. Job and income growth is still healthy enough to support debt repayments. But if the economic slowdown begins to broaden later in the year, carrying that debt burden will become a lot harder. And the Fed could end up with a slowdown that's a lot sharper than it would like to see.



THE WEEK AHEAD

INDUSTRIAL PRODUCTION

Monday, May 15, 9:15 a.m.

Most economists expect that industrial output rose by 0.4% in April. The gain will be chiefly in manufacturing, where a large 0.7% increase in the workweek likely offset a small decline in factory jobs. In March, total production was flat, while factory output fell 0.1%.

CAPACITY UTILIZATION

Monday, May 15, 9:15 a.m.

The moderate gain in industrial production suggests that capacity-utilization rates at the nation's mines, factories, and utilities edged up to about 84.2% in April, from 84% in March. Capacity constraints have eased since early this year.

The expected tightening would raise additional inflation fears.

HOUSING STARTS

Tuesday, May 16, 8:30 a.m.

Housing starts were probably unchanged in April from March's weak 1.4 million annual rate. Housing's continued slump is suggested by the 13.7% drop in building permits in March and the slim increase in construction jobs last month.

MERCHANDISE TRADE DEFICIT

Wednesday, May 17, 8:30 a.m.

The consensus is that the foreign trade deficit shrank to about \$10 billion in March, from February's \$10.5 billion. Exports probably rose in March, following a 0.6% uptick in February. Econo-

mists expect that imports—up 5.3% in February—were flat in March. Rising shipments offset a drop in other imports.

CONSUMER PRICE INDEX

Thursday, May 18, 8:30 a.m.

Consumer prices most likely advanced rapid 0.6% in April. Apparel and energy prices will lead the gain. In March prices rose by a strong 0.5%.

FEDERAL BUDGET

Friday, May 19, 2 p.m.

The U.S. government will probably post a \$33 billion surplus for April. Since most personal income taxes are paid in April, the month always brings black ink for the government. In April, 1988, the budget had a \$13.8 billion surplus.

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FIGHTING BACK

THE RESURGENCE OF SOCIAL ACTIVISM

At first, Phil Sokolof must have seemed like just another one of those crank-letter writers that companies often brush aside. Crusading against fat-laden tropical oils that have been linked to heart problems, Sokolof wrote about his own heart attack and pleaded with cookie and cereal makers to dump the oil. But Sokolof didn't stop there. In all, the 66-year-old Omaha millionaire sent out 11,000 letters. Then the full-page newspaper ads started, \$200,000 worth, with offending Hydrox cookies and Cracklin' Oat Bran cereal pictured under the stark headline: "The Poisoning of America."

That was six months ago. At the time, Kellogg Co., maker of Cracklin' Oat Bran, called the ad "irresponsible." Yet within a month the giant food processor decided to take the coconut oil out. Most of the packaged-food industry's other players have done the same, along with several fast-food chains.

Many of the companies say they reacted to the general public's concern about diet, not Sokolof's blitz. But whether by design or by chance, Sokolof won. And he's not alone. In recent months, environmental and consumer groups, virtually ignored for most of the Reagan years, have notched victories over insurance underwriters, cigarette companies, gunmakers, and even producers of racy television shows.

DECADE OF WAITING. It's not a return to the 1970s, when left-wing protest groups staged mammoth political marches and national boycotts. Yet the evidence seems undeniable that grass-roots activism is back. Does it all add up to a full-fledged backlash against business, which fared so well politically in the 1980s? Probably not. Still, more often than not business is the target—and will pay the price.

The situation is different this time around partly because the cast of characters has changed. Many activists, such as Sokolof, president of a company that makes metal parts, come from the other end of the political spectrum. Even those with '60s credentials have emerged, after a decade of waiting, more sophisticated in their methods and savvy about how business operates. "We're no longer able to simply beat up on business," says Bill Zimmerman, the 48-year-old Los Angeles-based political consultant who helped mastermind last November's California vote to roll back both auto and home insurance rates. "The arguments need to be sharper and better documented."

Brandishing reports that it said showed insurance companies making handsome profits on their investments while increasing individual rates, the consumer group Voter Revolt last November won narrow passage in California of Proposition 103. The measure would roll back auto and home insurance rates by 20% and impose a one-year freeze on new rate hikes. The victory marked the return to the national limelight of consumer advocate Ralph Nader, the proposition's most

Environmental and consumer groups, virtually ignored during the Reagan years, are winning victories again



visible supporter. Now, say both Nader and Zimmerman, the consumer movement intends to strike while the iron is hot.

"A new brand of citizen activism is under way," says Nader who this year bested Congress over its plan to give itself a pay raise. Just days after California's Supreme Court upheld the major elements of Proposition 103, Nader unveiled a plan to seek similar relief in several other states. He figures that the savings could run as much as \$23 billion annually. And farther down the road, Nader says, he intends to work on methods to combat rising health care costs, ozone depletion, and indoor air pollution.

With a mailing list of 200,000 as on prize from its Proposition 103 win, California-based Voters Revolt also is making big plans. Zimmerman says the group is looking at ballot initiatives to deal with crime, poverty, and medical insurance. The organization's most likely target in 1990, however, will be some of the tax breaks given to business by California

Proposition 13 in 1978. Reducing them could raise around \$1 billion annually, he says, and some of that money would be channeled toward low-cost housing. Local governments would get the lion's share to fund education, police, and other services cut after Proposition 13. Households would get rebates.

The insurance initiative took months of planning. Environmentalists, in a backhanded sort of way, plain got lucky. The Exxon Valdez oil spill yielded nightly TV footage of blackened beaches and oil-soaked birds that rallied the faithful. Dis



e's a growing backlash against business. targets range from the high insurance at Ralph Nader and Harvey Rosenfield roll back in California to the TV show *Nightingales* (lower right), which nurses have for portraying them as sexpots. In voters seek to place limits on high rises. r owners are fair game for protesters

keys around the country urged Exxon Corp. credit-card holders to relinquish their cards, and more than 10,000 did. legislation allowing oil exploration in the Arctic National Wildlife Refuge, ready for a Senate vote, was put on hold. Such groups as the Sierra Club, which raised \$115,000 to aid cleanup, saw their membership rolls swell. And suddenly, Oil finds itself back in the villain's role it occupied as oil companies spiraled upward in the 1970s. Executives at other oil companies worry that they, too, will soon become targets. Environmental groups just see a window of opportunity to ore points with the public, fumes consultant Herb Schmertz, former Mobil Oil Corp. vice-president for public affairs. hey're professional attackers." But you don't have to be an oil giant to feel the heat. And speed with which some companies react shows that after ars of being left alone, many are uncomfortable with public rutiny. When the American Nurses Assn. wrote to express may this April over how nurses were portrayed in the NBC evision show *Nightingales*, sponsors Sears, Roebuck & Co. d Chrysler Corp. quickly backed out. A spokesman for octer & Gamble Co., which argued that Sokolof's ad was sleading, nonetheless says it is taking palm oil out of its isco shortening "to remove it from all that confusion." **POISONED GRAPES.** Those reactions are typical, says University Southern California marketing professor Ben M. Enis. "A npany is only going to look like a bad guy if it picks those ids of fights," he says. "There's always another TV show toonsor." But Enis, an economist, also notes that such attacks e more frequent now. "For years, people have been worried

about the economy—where interest rates are going, the unemployment rate," he says. "For the last few years, things have been doing well with the economy. Now, they're looking around at other things that may affect their lives." Indeed, there's a wide range of new concerns popping up almost daily on the evening news. The scare about poisoned Chilean grapes is over, but concern about chemicals sprayed on apples lingers on. In Detroit, Nader's lawyers joined local citizens in a lawsuit to stall a three-year plan to merge the business operations of the city's two daily newspapers. Seattle voters are expected on May 16 to approve a ban on high-rise development. Jay D. Hair, president of the National Wildlife Federation, says people are also reacting to the huge amounts of toxic pollutants emitted daily. "They're angry, and they want to exert some sort of control," he says. Such exertion takes many forms. There are still some old-style guerrilla tactics. To save trees in the Northwest, environmentalists booby-trapped some with foot-long metal spikes that would spew shrapnel if struck by a logger's chainsaw. Animal-rights groups have sprayed red paint on New Yorkers wearing fur coats, and others have stolen into a hospital lab in Loma Linda, Calif., to free animals earmarked for research. With so many issues upsetting the public, environmental and consumer groups have no lack of causes around which to rally. "It's going to happen as long as there is an absence in leadership by our elected officials and corporations," proclaims Voter Revolt President Harvey Rosenfield. Though it may not be a backlash, business had better get used to taking the heat.

By Ronald Grover in Los Angeles, with bureau reports

A FAR-OUT MERGER SCHEME THAT COULD JUST FLY

A Pan Am-Northwest deal looks doable—if labor will go for it

What's in a name? Plenty, if you happen to be in the business of takeovers.

Take the recent announcement that debt-burdened, loss-riddled Pan Am Corp. wants to make an offer for Northwest Airlines Inc. Ordinarily, Wall Street would view this plan as a transparent maneuver by Thomas Plaskett, Pan Am's chairman, to tempt Northwest to buy him out. After all, Pan Am, which has been selling off assets just to keep going, has searched for a partner since February without finding any takers. Northwest's chairman, Steven Rothmeier, could buy Pan Am as a way to fend off Marvin Davis and other suitors.

But the involvement of Prudential-Bache Securities and Airline Group—a partnership of veteran investors Sid and

Lee Bass, Richard Rainwater, and Mort Myerson, as well as Equitable Life Assurance—has turned a far-out scheme into a respectable merger strategy. "These are super names," says one arbitrator. "I would much rather see Bass and Rainwater involved in Northwest than Marvin Davis." The Bases and Rainwater have a personal connection with one of Northwest's other suitors, Beverly Hills financier Al Checchi. Checchi once worked as a top aide to the Bases and is a passive investor in Airline. There seems to be no connection between the two merger proposals.

What the Bases, Equitable, and other investors in Airline Group bring to the deal is something Pan Am has sorely lacked for years—money to invest. Estimates are that these backers would pro-

vide more than \$300 million in equity a combined Pan Am and Northwest. With some real cash to anchor the deal and a generous tax shelter from Pan Am's \$1 billion in tax-loss carryforwards, the merger looks terrific on paper. Pan Am and Northwest together would make the only truly global airline in the U.S., with extensive routes over the Atlantic and the Pacific. Pan Am would reenter the Asian market, where its name still has a lot of cachet. It's not clear whether Rothmeier, Plaskett, or someone else would run the new airline.

TAKEOVER BAIT. It all looks good—but executing airline mergers is a messy business. "When you look at this deal," says Edward Starkman, an analyst at PaineWebber Inc., "the financing is the easiest part." The reason Northwest takeover bait is that the airline's earnings flattened as Rothmeier wrestled with the problems of putting Northwest together with Republic Airlines Inc. Says James Halverson, a spokesman for the Northwest unit of the Air Line Pilots Assn.: "We just seem to be getting over the merger of three years ago." Combining both the equipment and routes of the two carriers would be bound to di-

WHY NEW AIRPORTS ARE BACKED UP ON THE RUNWAY

Colorado Governor Roy Romer calls it his "oatmeal circuit." By 5:30 every weekday morning, the indefatigable Romer is in yet another Denver restaurant urging voters to support the construction of a new \$2.3 billion Denver airport in a special vote on May 16.

The Denver referendum is more than just a local political squabble. Because Denver would be the first major new airport to be built in the U.S. since Dallas-Fort Worth opened in 1974, government authorities around the country will be watching intently to see if the referendum flies.

'SELF-INTEREST.' On the face of it, there are plenty of arguments in favor of a new Denver airport. The present facility, Stapleton International Airport, is the nation's fifth-busiest, even though traffic has been falling recently because of higher fares and the Colorado recession. The Federal Aviation Administration warns that the aging airport can't begin to handle the 66 million passengers it forecasts for Denver by 2000.

But opponents aren't convinced. In the forefront are United Airlines Inc. and Continental Airlines Inc., which control about 85% of the flights at Stapleton. "The proposed airport is too ex-



STAPLETON: THE NATION'S FIFTH-BUSIEST

pensive and is not necessary, since traffic is declining," argues Lawrence Nagin, a United Airlines senior vice-president. An anti-airport faction has formed around Richard E. Young, a well-connected local lawyer, who

mounted a campaign to hold the May 16 referendum. Young questions the need to abandon Stapleton and the adequacy of the proposed financing for the new airport. "I am appalled at how Denver has proceeded with such a flimsy plan," he says.

Leading the counterattack are Romer and Denver Mayor Federico Pena. They argue that a new airport will attract new companies and generate up to 90,000 jobs. They also dismiss the objections of United and Continental as efforts to protect their turf. Reasons Romer: "They have no competition now, and a new airport might engender some."

TEXTBOOK CASE. Now, days before the vote, it appears that Romer will win. But opposition has already forced Denver to scale back its initial construction plans to 94 gates, from 120, and could delay the opening, now scheduled for April, 1993. And United and Continental will keep on fighting. Both carriers have refused to sign leases at the new field, and on May 9, they won a federal court ruling that prohibits the city from using Stapleton landing fees to finance construction.

Denver's experience is a textbook case of how politics and corporate self-

apt their service. If Plaskett does in Northwest, the unions on both sides will play the key role making the merger work. There's plenty that could go wrong. Pan Am's pay rates are considerably lower than Northwest's. Pilots make from 30% to 50% more at Northwest than for the same job at Pan Am. These rates aren't equalized in a merger, it could breed animosity among union members.

Seniority lists could be just as big a headache. Pilots are paid according to where they are on an airline's list. Such schedules determine who gets first crack at the easier, more attractive routes. When any two lines are merged, a fight almost inevitably ensues because someone has to go down on the roster. This issue has plagued Northwest since it bought Re-



PAN AM'S PLASKETT: EQUALIZING UNION PAY SCALES COULD BE A PROBLEM

Lines Inc., is the power of the unions to assist or foil the plans of a takeover team. Whether the investment bankers and financiers understand that fact is unclear. But some of them are going to find out.

By Christopher Power and Aaron Bernstein in New York

public. But Pan Am's unions are so worried about losing their jobs altogether that they might be more flexible. "Northwest and Republic pilots have been in a nuclear war over seniority integration," says Richard Berke, a pilot union official at Pan Am. "But that's a problem I would like to deal with. It would be a lot better than a bankruptcy."

What's clearly emerging from the speculation surrounding Northwest, and Eastern Air

THE ECONOMY

EXPORTS HAVE THE VAPORS

But U.S. factories overseas could bolster demand for goods

The export boom isn't dead yet—but it's certainly got a slow pulse. During the heady days of late 1987 and early 1988, the growth rate of nonfarm exports topped 30%. Exports of capital goods—stamping presses, industrial robots, airplanes, and the like—grew even more robustly. But the latest Commerce Dept. figures show that in the first three months of 1989, nonfarm merchandise exports rose only at a 6.5% annual rate (chart). Worse, adjusted for inflation, capital-goods exports actually fell.

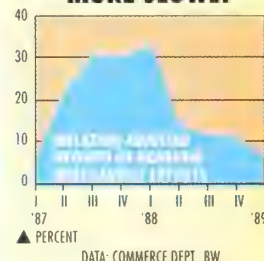
Yet most economists believe that

exports won't sit on the sidelines for long. The global economic expansion is running at a fairly good pace, creating a strong demand for U.S. goods. Moreover, export markets for American consumer products may finally be opening. And the growing number of U.S.-owned factories overseas could become potent customers for American suppliers.

DOLLAR RISE. Reviving the export boom won't be simple, though. For one thing, we have seen almost all of the gains from the falling dollar that we're going to see—in fact, it's been trending up of late. That's one reason the 1989 merchandise trade gap is expected to be about \$125 billion. Moreover, observes Bruce Steinberg, an economist at Merrill Lynch & Co., U.S. exporters have recaptured most of the international market share they lost during the early 1980s. "Any additional gains are at someone else's expense," says Steinberg, "so they're harder to get."

Still, many economists reckon that exports will soon start to accelerate. Lawrence Chimere, chairman of WEFA Group, an economic consulting firm in Bala Cynwyd, Pa., says that his clients are seeing export demand rise again after a couple of months of weakness. "The paper and chemical companies say their export orders have firmed up," he reports. And according to a survey done by economist Michael P. Niemira of Mitsubishi Trust & Banking Corp. in New York, major seaports and air-cargo busi-

EXPORTS ARE RISING MORE SLOWLY



interest could stall construction around the country. Many airports are already strained to their limits. In fact, the delays plaguing the country's most contested airports threaten to grow far worse as passenger volume doubles, to 100 million, over the next decade.

Although some \$8 billion worth of airport expansion is planned in cities from Orlando to San Francisco, many experts predict gridlock unless entirely new facilities are added. Yet only Denver and Austin, Tex., are planning new airports. Neither city is on the Air Transport Assn.'s list of the five areas most in need of new fields: New York, southern New England, south Florida, San Diego, and midway between Los Angeles and San Diego.

RESISTANCE. New airports and airport expansion don't always face the kind of resistance shown in Denver. Voters have approved the Austin plan to build a \$720 million field with 25 gates—up from the current 13—for completion in early 1995. The \$700 million expansion of the Orlando airport is also going smoothly, thanks to the tourist boom.

But Denver's experience promises to be the rule, not the exception. The Massachusetts Aeronautics Commission just released a study recommending that a new facility be built near Boston to replace Logan International airport as New England's primary

commercial terminus. Although construction is years away, the commission already expects fierce resistance in the densely populated region.

The challenge of building new airports is clearly a national headache. In Orange County, Calif., authorities are so desperate for a new airport that they even considered an implausible plan to build a \$4 billion facility that would float at sea. Nearby homeowners have all but killed a plan to convert a local Marine air base into a civilian facility. And local opposition has delayed expansion at Dallas-Fort Worth.

Meanwhile, there is growing pressure to remove some of the obstacles Denver has faced. Congress isn't happy that only one or two airlines control most major airports. Separately, the Airport Operators Council International will soon ask Congress to approve a new "security and capacity" charge of \$3 to \$5 per passenger. The council estimates security improvements will cost \$1 billion nationwide. Any surplus, it says, should fund construction.

But nothing proposed to date will overcome the problems that block more airport building. Without more aggressive action, too many airplanes will be landing on too few runways for a long time to come.

By William C. Symonds in Denver and Seth Payne in Washington, with bureau reports

ing business will increase over the next three months—good news for exports.

Consistent with this qualified optimism, Merrill Lynch is predicting about 8% inflation-adjusted growth in merchandise exports for the year. That's low next to last year's 24%, but it still outpaces the economy as a whole. Chimerine gives exports a good chance of hitting 10% growth after inflation. DRI/McGraw-Hill is forecasting about 9% merchandise trade growth for 1989—and an 11.6% gain for capital goods, even after the poor first quarter.

WILD CARD. Any rebound in exports will be driven by sustained demand from America's major trading partners. David G. Hartman, an international economist at DRI, expects to see 3%-to-4% inflation-adjusted growth in demand from the major European nations—even though West Germany just recently started pushing up interest rates in an attempt to slow its economy. Japan will maintain 5%-to-6% economic growth—not boom-time conditions but certainly enough to keep up the demand for U.S. goods.

The global expansion will also benefit manufacturers of such consumer goods as toys, toiletries, and cosmetics. In the past, these products have accounted for only 7% of total U.S. merchandise shipped overseas. But over the past year, such consumer-goods exports have risen in value by almost 40%, as U.S. companies expanded their marketing abroad. Now, consumer products make up 10% of exports. Having finally broken into foreign markets, they may be ready to make additional gains.

The real wild card is the trend among U.S. companies to expand production facilities in Europe and Asia. There were almost 150 new manufacturing projects in 1988 alone, according to a just-released report from the Conference Board. Such overseas factories may very well be a boon for U.S. capital-goods manufacturers, says DRI's Hartman. In recent years, many American companies, like their Japanese counterparts, have established closer links with their suppliers. So U.S. companies expanding overseas may look to their current American sources for machinery and parts—which would provide an unexpected boost to growth in exports.

Even a revitalized export boom won't make much of a dent in the trade gap, though, if imports continue rising at their current 6% rate. To close the deficit by the time the next Presidential election rolls around, merchandise exports would have to grow at 15% annually for the next four years—and no one dares hope for that kind of good news.

By Michael J. Mandel in New York

TAKEOVERS

A TAKEOVER OF AVON COULD MEAN A MAKEOVER FOR AMWAY

Avon could open markets abroad and propel Amway to the top at home

Only weeks ago, no less than big-time raider Irwin L. Jacobs called Amway Corp. an "unknown superpower" sprawling across the farmland of western Michigan. No more. Family-owned Amway is flexing its muscles for the first time—with an unwelcome \$2 billion bid for Avon Products Inc. A merger would not only vault Amway to the top of the direct-selling business, it could finally bury the ultraconservative, Bible-thumping image that has clung to the Ada (Mich.) company for years.

Despite Avon's drawbacks—not the least being its more than \$1 billion in debt—Amway sees a perfect match that would command the attention of potential marketing partners worldwide. "We're going to rewrite the history book on direct selling," says William W. Nicholson, Amway's coordinator of policy and planning. With Avon, Amway would have 2.5 million independent sales representatives for nearly \$5 billion worth of products and services.

GOOD FIT. Another drawing card is the minimal overlap between the two giants of this growing industry. Avon's prime focus, beauty products, is only a fraction of Amway's \$1.8 billion in sales (table). And Avon is strong in some spots abroad where Amway has yet to gain a foothold. Even with plans to keep Avon and Amway sales channels separate, Amway figures that manufacturing, distribution, and buying efficiencies could save more than \$100 million a year.

But so far, New York-based Avon has resisted a marriage with its rural rival. Avon's chief executive, James E. Preston, has declared that the company is not for sale—and he has taken Amway to court. Preston contends that a payoff for investors is finally in sight now that Avon has shed disastrous health care businesses and pumped up its core beauty lines. As for Amway, Preston's disdain is only thinly disguised. "Our distribution and selling systems—to say nothing of our culture and values—are enormously different," he says.

At the right price, though, Avon can't be too choosy about its suitor. Analyst Andrew Shore of Shearson Lehman Hut-

ton Inc. calls Amway's offer of \$39 a share fair. That's \$7 higher than the stock's price before Amway showed up. Avon doesn't see a bid higher than \$39. Given the company's heavy debt—8% of total capital—"Avon does not have a lot of defensive alternatives," he says. And if a bidding war should develop,

with potential rescuees, Amway would have the benefit of little debt and no shareholders demanding a quick payback.

Founded 30 years ago on the belief that individual effort can achieve almost anything, Amway—a contraction of "American Way"—may discover that buying Avon is the easy part. It could still be thwarted by mass defections from the ranks of 1.5 million "Avon ladies." More than 80% of Avon's representatives are women who sell part-time. In contrast, Amway attracts mostly middle-class couples who are drawn by promises of hefty bonuses and exotic trips, including seminars on Amway's 1,800-acre resort in the British Virgin Islands. Distributors are rewarded for the sales of those they recruit in Amway's pyramid-style system.

But money isn't the reason Amway distributors stay, says sociologist Nic-



ALL ABOUT AMWAY

Headquartered in Ada, Mich., Amway Corp. was founded in 1959 by Jay Van Andel, who remains chairman, and Richard DeVos, president

1988 SALES \$1.8 billion (August fiscal year)

OPERATING PROFIT \$175 million (estimate)

WORKFORCE 7,000 employees, plus 1 million independent distributors in more than 40 countries

PRODUCTS 300 Amway-brand items in home and personal care, health and fitness, and commercial lines; 4,000 brand-name goods and services

MANUFACTURING PLANTS Ada, Mich.; London, Ont.; Buena Park, Calif.

SUBSIDIARY OPERATIONS Amway Grand Plaza Hotel, Grand Rapids, Mich.; NutraLife Products Inc., Buena Park, Calif.; Peter Island Resort in the British Virgin Islands

DATA: AMWAY CORP.; SHEARSON LEHMAN HUTTON INC.

CHEVROLET TRIES TO GET THE LEAD OUT

Jim Perkins guns for Ford with a string of new cars and trucks

Biggart of the University of California at Davis. Her studies of the industry and that Amway agents, in particular, are drawn by shared beliefs in God, family, and free enterprise. Their rallies have often been compared to revival meetings, with founders Richard M. DeVos and Jay Van Andel the objects of veneration. Merging Amway and Avon would be like combining two religions," says Biggart.

Amway's Nicholson insists that this reputation is outdated. He surely has done his best to change it. Since joining the company in 1984, this onetime appointments secretary for President Gerald R. Ford has guided Amway into more sophisticated products and services, including credit cards and prepaid travel plans. While the company still makes laundry detergent and bug spray, it has also signed marketing pacts with big names such as MCI, Firestone, and Coca-Cola. These joint ventures have helped boost Amway's sales nearly 30% in the current fiscal year. Says Nicholson: "Are you going to risk the Coca-Cola brand name on a bunch of crazies?"

RAGS-TO-RICHES. Even without Avon, Amway is clearly headed away from its roots. At ages 63 and 64, the founders are preparing to hand over the business. The empire that grew out of their basement will soon be passed on to their eight children, all of whom work at the company. But unlike their fathers, the children lack the rags-to-riches appeal that has enticed so many fervent Amway distributors. The heirs must attract budding entrepreneurs solely with Amway's opportunities for profit.

The takeover bid itself is dramatic evidence that Amway is taking on a professional gloss. When it decided to chase Ford, it signed up the Minneapolis-based Cobbs, who is one of the best-known leveraged specialists in the country. This unlikely alliance raised eyebrows even on Wall Street, but it began innocently enough. Nicholson met Jacobs over rough powerboating, Nicholson's hobby and one of Jacobs' business interests. Now, after teaming up with Amway to buy 10.3% of Avon, Jacobs stands to profit handsomely. Amway intends to buy him out, along with the rest of the shareholders.

Despite the changes, there's no denying that Amway still likes to do things in its own idiosyncratic way. The company isn't hiring an investment banker to develop its takeover strategy, and it's not planning to finance the deal with junk bonds. To Wall Street, that's hardly the American Way. But for the folks at Amway, the only opinion that matters now is on Main Street, where it could soon be bustling with more business than ever.

By Wendy Zellner in Ada, Mich., with Kathleen Deveny in New York

The "Heartbeat of America" has been irregular. Despite selling 40% of General Motors Corp.'s cars, Chevrolet Motor Div. last year fell behind Ford Motor Co.'s Ford Div. in new-car sales for the first time in a strike-free year since 1957 (chart). The slide was ominous for GM, since Chevy is expected to lure young buyers who later will move up to Oldsmobile, Buick, and Cadillac.

Now, the heart has a new doctor. On May 1, Jim C. Perkins replaced the retiring Robert D. Burger as general manager of Chevrolet. Two days later he told dealers via satellite hookup that "Ford is our target." He wants to reclaim the No. 1 spot in 1991 or maybe even 1990. After that, though, Chevrolet will have to take on the world.

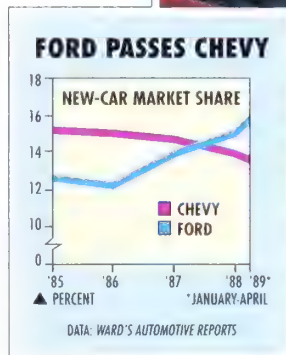
Perkins hopes a string of new cars and trucks will put Chevy back on top. Over the next 12 months he'll unveil the 380-horsepower ZR-1 Corvette, which has been drawing raves in car magazines; convertible versions of the Beretta and Geo Metro; a four-door Blazer that could steal sales from the Jeep Cherokee; a new Caprice; and a redesigned Camaro. But his money is riding on the Lumina four-door sedan, base-priced at \$11,883, and the Lumina coupe and minivan rolling out later in the year.

Along with its sister GM10 cars already offered by Olds, Buick, and Pontiac, Lumina represents GM's bet on the midsize car market. So far, the others haven't sold well because only two-doors were available. Eventually, though, the GM10s could account for one-fourth of GM's car output. That makes the Chevy Lumina the bread-and-butter model of GM's bread-and-butter car at the bread-and-butter division—and GM's best hope for a Ford Taurus-killer.

Like the Taurus, Lumina is a family sedan, which puts it at the center of the coming car wars. Arthur G. Davis, a Prescott, Ball & Turben Inc. analyst, thinks that "success in the family-car market will largely determine incremental earnings" for the major carmakers over the next two to three years. Depending on the overall market, Davis says, buyers' acceptance of the Lumina



PERKINS: THE MIDSIZE LUMINA IS CHEVY'S BIGGEST BET



models and other GM10s will help to determine if GM's profits in 1990 are just \$6 a share—or \$20.

Everyone is crowding into that segment. Besides current Ford and Chrysler

models, Toyota, Honda, and Subaru are unveiling family sedans. Says Christopher W. Cedergren, an analyst at market researcher J. D. Power & Associates: "Ford really isn't the threat."

'A SIGNAL.' Perkins knows that better than perhaps anyone at GM. In a break with GM's policy of not rehiring departees, Perkins was recruited back to GM in January after spending four years at Toyota Motor Sales USA Inc. "I marvel at [GM Chairman Roger B.] Smith's having the guts to go out and do this," says John F. Bergstrom, owner of Bergstrom Chevrolet-Buick-Cadillac Inc. in Neenah, Wis. Adds Thomas B. Wagner, Ford Div. general manager: "That was a signal to the organization that things aren't the same around here anymore."

Having learned at Toyota about consensus, Perkins decided to focus on Ford. "It has a lot to do with pride and a lot to do with motivating an organization," he says. Once he steadies the Heartbeat, he'll turn to his true rivals.

By James B. Treece in Detroit

CAN A NEW CEO PULL BURGER KING OUT OF THE FIRE?

Barry Gibbons is restructuring fast. Diversifying the menu may be next

Unlike someone else who recently passed the same milestone, Barry J. Gibbons can hardly be accused of inactivity during his first 100 days in office. The chief executive of Burger King Corp. has been shaking things up ever since he was installed at the chain's palatial pink Miami headquarters by new parent Grand Metropolitan PLC. Gibbons has laid off about one-third of Burger King's corporate work force and has restructured the chain's troubled \$1 billion distribution subsidiary. Now, in his most critical move, Gibbons will soon choose a new ad agency for Burger King's \$150 million account.

Small wonder Gibbons felt he had to hit the ground running: Grand Met's \$5.75 billion takeover of Pillsbury Co. brought it a losing fast-food chain. Burger King's profits have plunged 59% in two years, to \$48.2 million, and per-store sales have stayed flat, at about \$1 million, since 1985. "Grand Met bought a pig in a poke," says analyst William F. Maguire of Merrill Lynch, Pierce, Fenner & Smith Inc. "They have to clean it up from the inside out."

AD FLOP. That's exactly what Gibbons was thinking when he slashed 550 management jobs. "I wanted to start with a clean sheet," says Gibbons, 42, who ran Grand Met's restaurant division in Britain. He consolidated all field-office marketing, financial, and personnel functions at headquarters and eliminated a couple of layers of bureaucracy there as well. Gibbons says he'll eventually rebuild many of these staffs in a more efficient way.

At the same time, Gibbons wants headquarters to be less involved in store operations. From now on, routine problems at Burger King-owned outlets, such as replacing a broken air conditioner, will be handled by one of 22 regional offices. Gibbons has also set up a toll-free number for customer complaints. "My philosophy is that if a snake walks through the door, kill it," he says. "Don't call McKinsey & Co."

Despite the tough talk, Gibbons chose a gentler approach with a unit that many observers thought was one of Burger King's biggest snakes. Grand Met had planned to sell Distron, the chain's money-losing food and paper-product distribution unit. The subsidiary was a source of friction among franchisees, who complained of price-gouging and shoddy service. Some 40% now buy their supplies elsewhere. But Gibbons felt that Distron could help lower costs and improve quality control—a perennial problem at Burger King. To run the operation more efficiently, Gibbons broke it into separate procurement and distribution companies. That way, franchisees can use one service but not the other.

Gibbons figures he has until September—the end of Grand Met's fiscal year—to finish restructuring Burger King. But it's bound to take much longer to revamp the marketing strategy. To help, Gibbons lured Gary L. Langstaff away from Hardee's Food Systems Inc. Langstaff will play a major role in choosing a replacement for N.W. Ayer Inc., Burger King's incumbent ad agency and architect of its latest ad flop,

the "We do it like you'd do it" campaign. Competing for the account are D'Arcy Masius Benton & Bowles, Saatchi & Saatchi, and J. Walter Thompson—which lost Burger King to Ayer in 1987. Some insiders give the edge to DMB&B, partly because Langstaff used to work there.

Gibbons says he wants the winning agency to place less emphasis on chasing McDonald's Corp. and more on targeting the "snack and grazing industry." To do that, say agency executives involved in the pitch, the chain will have to move aggressively to diversify its menu—no easy task when your name is Burger King. And some previous efforts have been disappointing. Its Croissantwich, for instance, hasn't helped Burger King break ground in the breakfast market. But McDonald's has responded nibbly to America's waning appetite for burgers (table). The No. 1 fast-food chain's per-store sales have risen 5% annually, to \$1.54 million, thanks to new items such as prepackaged salads.

TIGHTER TEAM. Burger King's inconsistent quality won't be solved easily, since the chain owns only 15% of its restaurants. "Unless they get more conformity from franchisees, Grand Met can't do anything at Burger King," says an executive at a competing hamburger chain.

Gibbons believes that even with its problems, Burger King can achieve significant growth—possibly by the end of this year. But for the moment, he is relying on reassuring gestures to pro-

up morale. He keeps franchisees up to date with videotaped talks and he's planning a six-city road show in June. "He's a dynamite guy," says Daniel Accordino, executive vice-president of Carrols Corp., which owns 157 Burger Kings. "He could reenergize the whole system."

On Apr. 26, Gibbons' 100th day, he treated the headquarters staff to lunch in the company cafeteria. In return, he received a poster that read "Thank you, Barry, with more than 10 signatures in multicolored magic markers. Now, Gibbons must win over customers as quickly as he charmed his staff.

By Pete Engardio in Miami, with Brian Bremner in Chicago

BURGER BOREDOM?

Percentage of fast-food customers likely to order each item

Item	1984	1988
BURGERS	59%	54%
BREAKFAST SANDWICHES	6	8
SALAD	5	7
CHICKEN NUGGETS	4	5
CHICKEN SANDWICHES	4	4
FISH	2	4

DATA: NPD CREST





KELLOGG CLAN: "WE DON'T GIVE BUY OR SELL SIGNALS. WE JUST RAISE RED FLAGS"

POTTING STOCKS IN TROUBLE BEFORE THEY DROP

Kellogg Associates warned investors about Blockbuster Entertainment

Papers are stacked everywhere in the cramped attic that passes for Loren and Denise Kellogg's office. The couple's 10-year-old daughter Elizabeth is pressed into clerical duty as business gets hectic. More than 6 a.m. call from an anxious East Coast investor has awakened them at their Laurel Canyon home.

Don't let the mom-and-pop trappings fool you. In the past year, Los Angeles-based Kellogg Associates has begun to make a name for itself on Wall Street as a number-cruncher whose reports can predict impending stock disasters. Its negative reports on The Gap Inc. and Rentech Inc. forewarned investors of potential setbacks in those stocks. And late April, they vaulted into the limelight with an acerbic report about balance-sheet oddities at Cineplex Odeon Corp. The report has become ammunition for MCA Inc. and other shareholders in a struggle with top managers for control of the theater chain. The firm's April blast at Blockbuster Entertainment Corp. alerted Kellogg clients ahead of a tumble in the video store chain's stock on May 9 and 10.

D-FASHIONED WAY. Using classic, green-eyeshade accounting, the firm touts financial reports for inflated inventories or goodwill, heavy insider trading, or deceptive cash flow numbers. The goal: spotting the ticking time-bomb in a client's portfolio before it blows up

in his face. "We are more or less detectives," explains 35-year-old partner Denise Kellogg. "I love a good scam." Says client Fulton J. Wick, an analyst at Niagara Share Corp.: "They're able to pull out nuances that I might miss."

The firm's patriarch, 74-year-old Irving Kellogg, has been at this for years. A lawyer and certified public accountant, Kellogg formed the firm in 1988 with his 36-year-old CPA son Loren and daughter-in-law Denise, an accountant. The Kelloggs monitor about 150 stocks for clients that include institutional investors, short-sellers, and other large speculators. The firm won't disclose its revenues, but it charges customers an estimated \$8,000 a year for several reports a month, plus occasional customized assessments. Information comes the old-fashioned way: from public documents such as 10Ks, proxy statements, and quarterly reports.

They shun discussions with company managers, fearing that might skew their reading of the books. That doesn't al-

'There are a million sources of positive information. We're one of the very few sources of negative information'

ways sit well. Stuart L. Bell, chief financial officer for CUC International Inc., fumes that Kellogg panned CUC's method of booking expenses without asking management for its reasons. "Companies like Kellogg don't take time to go out and understand our business or meet our people," he complains.

IVORY-TOWER APPROACH. Still, CUC, which provides travel and shopping services, ultimately altered the way of amortizing costs that Kellogg criticized. Bell contends CUC made the change "because various people in the marketplace hated our accounting." The switch caused a \$51 million charge, and CUC's stock now is 24% lower than when Kellogg issued its first warning in August.

Loren Kellogg defends his firm's ivory-tower approach. "We don't give buy or sell signals," he says. "We just raise red flags." Ideally, he says, it is the investor that grills management. Kellogg simply provides the questions. "We use Kellogg's reports to tie the accounting numbers together with the backgrounds of the principals and the company's fundamentals," says Joseph L. Feshbach, a leading short-seller.

The Kelloggs cringe at the notion that they are tools for short-sellers. Most of their clients are long, they claim, and they refuse to publish reports based on short-sellers' tips. Still, the firm's eye for bad news gives it a distinct market niche. "There are a million sources of positive information on the Street," says Denise Kellogg. "We're one of the very few sources of negative information."

Kellogg clients got just such information last July on Liz Claiborne Inc. They were warned that bloated inventories and store startup costs could hurt profits of the fast-growing apparel maker. A few weeks later, the company cited those reasons in reporting a 25% quarterly profit decline.

The Kelloggs really rocked the boat with their Apr. 19 report saying that Cineplex, among other things, inflated operating revenues by including gains from the sale of a group of theaters. Cineplex had no comment.

Kellogg's latest coup was its recent warning that Blockbuster's skyrocketing sales were masking trouble: rising expenses, overhead, and ballooning goodwill. Blockbuster says these are simply results of rapid expansion. But when Bear, Stearns & Co. raised similar objections to the video chain's accounting on May 9, the stock dropped 22% in two days, after a meteoric two-year climb.

"We're not afraid of highfliers," says Denise Kellogg. "If somebody has been pumping up earnings, it's only a matter of time before a pin bursts it." For the Kelloggs, there's nothing better than wielding that pin.

By Kathleen Kerwin in Los Angeles



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JESSE JACKSON FOR MAYOR? HE WON'T SAY NO

But a crowded agenda includes voter registration and fighting drugs

For most unsuccessful Presidential contenders, once the roar of the crowd dies down, there is nothing but silence. Not Jesse Jackson. He is marching in picket lines with striking workers. He plans to follow up his visit to the Soviet Union with a national telethon for Armenian earthquake victims. He's considering hosting his own weekly TV talk show. And perhaps most startling of all, he's struggling to cope with a groundswell of public support for a possible mayoral candidacy in drug-ravaged Washington, D.C. Mayor Jackson? In a May 10 interview with *BUSINESS WEEK*, Jackson hemmed, hawed—but didn't flatly rule out the possibility.

Q A new Washington Post poll shows that if you were to run for mayor, you'd defeat incumbent Marion S. Barry Jr. by 68% to 17%. How can you resist the temptation to run?

A I have no plans to run for mayor. I support Marion Barry. This flurry of articles didn't contain any quotes from me, and it's creating a perception that's independent of anything I've said.

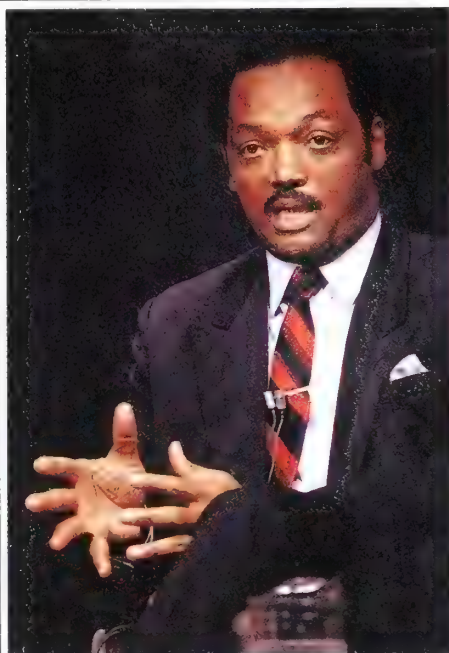
Q So why are you sprucing up the house you own in Washington?

A Anytime I come to Washington, three or four of us [have to] stay in a hotel. It makes more sense for us to have a house and equity than to stay in hotels.

Q Yes, but if Barry is so severely damaged by the scandals besetting his administration that he can't run, aren't you poised to step in?

A I'm not going to deal with the hypothetical. One of my concerns is the colossal groundswell from writers and unsupportive politicians. Is their motivation to save Washington? If so, why did they move out of Washington? Or their obsession with my role in the Democratic Party in 1992 and beyond?

Q Drugs seem to be uppermost in District residents' minds these days. What's your impression of the Bush administration's antidrug efforts?



'The Administration has no drug plan. We are being humiliated in the nation's capital, in New York, in Miami'

A The Administration has no drug plan. We are being humiliated in the nation's capital, in New York, in Miami. We need to work out a comprehensive plan [with drug-producing nations]. It must involve debt forgiveness, alternative crops, and some military aid.... The [William J.] Bennett jail-building program and the [Jack F.] Kemp put-'em-out-the-house program don't begin to address the problem.

Q According to the polls, President Bush seems to be far more popular with blacks than Ronald Reagan was. Why is that?

A In contrast to Reagan, Bush is less hostile and more hospitable. But Bush [policy] is like cotton candy. It's sweet. But when you're through, all you have is the belch. There's no solid nutrition in the Bush menu.

Q What are your major political objectives now?

A First, voter access. I'm pushing for same-day voter registration. We have greater barriers to voting than Nicaragua, Panama, the Bahamas, and Taiwan. Second, [fighting] drugs. It's a unifying theme and a common threat. Third, rehabilitation. We need to invest more in prenatal health care and in national health insurance. Fourth, community reinvestment. If you propose a \$200 billion bailout plan for S&Ls, you ought to link that with aid for the poor. And you can tap billions in private and public pension-fund money to aid in the effort by creating an American Investment Bank modeled on the World Bank. Next year, a big focus will be the census count and 1991 [congressional] reapportionment.

Q Why are so many black mayors in political trouble these days?

A Scattered incidents don't make a trend. The redlining and divestment of urban America have given mayors less resources. Whether you're African-American, Hispanic, or Greek-American, people expect you to deliver police and fire services, affordable housing and health care, and an educational system that works. When those resources are cut, you're less able to deliver.

Q Last year, you and Mike Dukakis agreed to rules changes that increase proportional representation in Democratic Presidential primaries. How do you feel about current efforts to undo the deal?

A Proportionality is fair. It's the way to expand the party and bring in new voters. Any attempt to reduce the worth of those new Democrats threatens the party's ability to elect congressional candidates and governors. In '88, we left the Atlanta convention with a 17-point lead. We didn't lose because of the rules.

Q What about reports that you're about to become a television-show host?

A We are interested in working out some way to have more consistent access to the public. When you look at Washington news shows on Sunday, you see a very narrow group of inbred friends who impose their views on the nation. There are other points of view than those of the Beltway scribes and wise men.



MAYOR HERNANDEZ AND NEGOTIATOR HERMOSILLO MAY BUILD THE STADIUM IN A GRAVEL PIT

ALL THOSE BIG, BAD RAIDERS WANT IS A HOME SWEET HOME

The Los Angeles football team's deal to play in nearby Irwindale is stalled

Al Davis likes his football players mean. He dresses them in black uniforms with a pirate on the helmet to emphasize the point. And the 59-year-old owner of the Los Angeles Raiders is himself a tough customer. He has sued the National Football League—and been sued by it. These days, he's locked in a multimillion-dollar litigation with the Los Angeles Memorial Coliseum over his decision to find a snazzier stadium for the team. One tough dude, Davis, but now even he must be feeling a little vexed at how difficult it's becoming to build a new stadium to call home.

Nearly two years ago, Davis thought he had solved his problem when he signed a \$115 million deal with Irwindale, Calif., a tiny city 18 miles east of Los Angeles known mainly for its gravel pits. What has followed has been a comedy of errors, from a botched plan to sell municipal bonds to a legal scrap between the city's mayor and the man he chose to head the stadium-building project. And the Raiders, who have given the city three months to clear up its problems, are getting anxious.

FREE LAND. Davis needs a stadium by 1992, when his lease on the Coliseum expires. Irwindale would be perfect. In an effort to attract new business, the city of 1,068 residents offered the Raiders a sweetheart deal: free land, a low-interest

loan, ownership of the stadium—even a \$10 million bonus to sign the agreement.

But the deal ran into trouble fast. A Los Angeles superior court judge in Sept., 1987, slapped Irwindale with an injunction barring the city from building a stadium. The reason: It had failed to do a study on the environmental impact of building a 65,000-seat facility in one of the city's 17 gravel pits. The study wasn't completed until February. But now the city is thinking about shifting to an alternate site to avoid paying the county \$35 million to buy adjacent land for parking.

Then there's the problem of money. The injunction killed a plan to raise \$90 million via municipal bonds. That left the city scrambling to find some other way to pay for the stadium. The latest scheme is to raise \$35 million in grants from local businesses, including a Miller Brewing Co. plant, and borrow the rest. But to date, not a penny has been raised.

Among the problems facing the Raiders: Irwindale has yet to raise a single penny to pay for a new facility

To top it off, for months, no one really knew who was running the show. On Apr. 27, recently elected Mayor Salvador Hernandez, a former city councilman turned over negotiations to a three-man team. In charge now is public relations consultant Xavier Hermosillo, who was fired from the same job a year ago by Hernandez' predecessor. Hermosillo admits that so far the city has not got a concrete financing plan in hand. "We've had tons of obstacles," he says. "It's been unbelievable."

TURNOVER CITY. Just keeping the hell has been a big hurdle. This year, the city fired its consultant, Frederick P. Lyte, and a key lawyer, Kenneth L. Adams. Lyte, a millionaire developer who has helped the city over the past 12 years to lure new industry, had promised to raise the \$35 million from businesses. But a personal dispute between Lyte and former Mayor Patricio Miranda led to Lyte's firing. Lyte had no comment on the dispute, but his supporters have launched a recall petition to get Miranda, now on the city council, and Mayor Hernandez removed. Also let go was the Washington (D.C.) law firm of Dickstein, Shapiro & Morin, which had lined up several financial backers. "Mayor Miranda wanted his own folks in on the deal," explains former Irwindale lawyer Adams, a Dickstein Shapiro partner. Miranda has not returned calls from BUSINESS WEEK.

The Raiders haven't given up yet on Irwindale, though their patience is wearing thin as deadlines loom. "It's a hope rather than an impression that the city can deliver," says Raiders' senior executive John A. Herrera. "We've given them every opportunity to produce."

Davis, who was once awarded \$35 million when the NFL was found to have tried illegally to block his 1982 move from Oakland, Calif., will walk away with money in hand in any case. If the deal collapses, he would keep the \$10 million he already has been paid by Irwindale and collect another \$10 million from the city as a penalty for failing to come up with the financing.

There are plenty of other cities who want the Raiders: Sacramento has been mentioned, Coliseum officials say they would welcome the team back, and even Oakland is still interested. "The Raiders have a home if they want to come back," says George J. Vukasin, president of the Oakland-Alameda County Coliseum.

And Irwindale? Hermosillo jokes that if the deal with the Raiders falls through, he'll try to lure "an under-six foot basketball team." He's joking now. But the way things are going, that may be all his town ever gets.

By Patrick E. Cole in Irwindale, Calif.



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In Business This Week

EDITED BY HARRIS COLLINGWOOD

BANNER MAY FINALLY HAVE ITSELF A DEAL

► After a pair of failed take-over attempts, Banner Industries appears to have won Fairchild Industries. On May 8, Banner offered \$18 a share, or \$265 million, in cash for all of Fairchild, topping a \$17.50 bid by Carlyle Group, a Washington buyout boutique.

If the deal goes through, it will bear little resemblance to Banner's 1987 acquisition and bust-up of machinery maker Rexnord. Banner expects to hang on to most of Fairchild. And instead of depending on junk-bond financing as in the past, it can fund the Fairchild deal largely with its own cash. But Banner may see its prize snatched away. Sources close to the situation say that two unnamed European groups have signed letters of confidentiality with Fairchild and are currently crunching numbers on the company.

MORE TROUBLE FOR TIME-WARNER

► Viacom has filed a surprise \$2.4 billion antitrust suit alleging that Time, owner of the largest pay-TV network and second-largest cable operator, blocked Viacom's Showtime Network from competing in New York City and other markets over the past decade. The suit adds new uncertainty to the Time-Warner merger, which is already weighed down by a tussle with Chris-Craft Industries, Warner Communications' largest shareholder. Time called the charges "totally baseless."

GOOD NEWS ABOUT AN AIDS DRUG

► A National Institutes of Health study published in the May 5 issue of the magazine *Science* confirms earlier reports that alpha interferon helps the drug AZT fight AIDS.

Alpha interferon, unlike AZT, can suppress the release of the AIDS virus from infected cells. That means the drug could slow the onset of symptoms in patients.

More good news about alpha interferon is expected from two studies to be released later this month: In one, patients with a chronic form of hepatitis responded well to the drug. In the other, treatments combining alpha interferon and another drug, known as 5FU, proved effective against certain cancers. That should boost interferon marketers Schering-Plough and Hoffmann-La Roche, as well as patent holders Biogen and Genentech.

IBM VS. APPLE IN PC SOFTWARE

► When IBM introduced its PS/2 computers in 1987, a big selling point was the advanced OS/2 operating system—the basic software that runs a computer. But few programs are written for OS/2, which requires loads of expensive memory. The result: PS/2s are selling well, but OS/2 isn't. So now IBM is offering rebates of as much as \$800 to OS/2 buyers who also purchase additional memory, disk drives, or any of 39 OS/2 applications packages.

Meanwhile, Apple Computer is pushing its new operating system—which isn't due before early 1990. On May 9,

PARTY TIME—IF YOU'RE NOT FRANK LORENZO

In the midst of buyout talks and bankruptcy hearings, Frank Lorenzo probably isn't in a partying mood. He won't comment, but he's not expected to show up at "No-Frank-Lorenzo Night" at the Sports Rock Café in Miami on May 16. The bar says striking Eastern employees will get free admission and reduced prices on cocktails. They'll also get to compete in a Frank Lorenzo look-alike contest and throw darts at a board emblazoned with the likeness of the Eastern chairman. On the menu: FRANKfurters and a special drink in Lorenzo's honor: "hemlock" o the rocks. It won't really be poisonous, says café manager Cyndi Ross, but she's keeping mum about the ingredients.

Ross says she expects about 2,000 Eastern strikers to show up. And she'd love for Lorenzo to drop by and join the fun. Insisting she bears no animosity toward Lorenzo, Ross says: "It's just a spoof."



Apple told software developers that with the new System 7.0, the Macintosh can run fancy networking and graphics programs. And System 7.0, Apple claims, will run old Macintosh programs better than OS/2 handles old PC software.

OGILVY ISN'T ABOUT TO PACK IT IN

► WPP Group isn't giving up the chase. After proposing a \$45-a-share takeover of Ogilvy Group last month, WPP raised its all-cash bid to \$50 a share, or \$750 million, on May 8. That sent Ogilvy's stock up to 51½.

Ogilvy's board is expected to review the new price at its May 16 meeting. Industry sources say the agency is still hoping to remain independent through a leveraged buyout. But that plan is almost impossible, say Wall Street sources in light of the higher offer. More plausible is the appearance of a white knight, such as Dentsu, the giant Japanese agency.

SCORE ONE FOR THE SANCTIONS LAW

► The 1986 law banning some South African imports was finally dusted off when a suburban New York aircraft parts dealer got hit with the first criminal charge for sanctions-busting. To import four South African jet engines, Air Ground Equipment Sales (AGES) claimed it had bought the illegal goods from an Israeli outfit. AGES and its CEO, Robert Fessler, have pleaded guilty to falsifying documents.

That doesn't necessarily mean the feds are getting tough on apartheid. The AGES scam would never have come to light if the truck delivering the engines hadn't topple over on the Long Island Expressway.



London New York

LUNCH

Selection of canapés

Appetizers

Golden Asetra caviar presented in a wholemeal tartlet
Accompanied by new season Scottish smoked salmon with
a natural filling of curd cheese, cucumber and mint and a
papillote of trout and salmon mousse

Chilled mango with a combination of citrus fruits

Hot hors d'oeuvre featuring a croustade of wild morels
chanterelles and girolle mushrooms

Soup

Chicken consommé garnished with truffled palatine
Chilled cream of mulligatawny soup

Main courses

Roast fillet of prime beef. Served with Bearnaise sauce

MR Poached baby lobster prepared with shallots, chablis
and dry vermouth, flavoured with essence of Welsh mussels
and fresh mustard seeds

Breast of duckling with truffled stuffing
Garnished with walnuts and grapes

Vegetarian speciality featuring a timbale of aubergines,
pearl barley and hazelnuts with fresh tomato and basil

Vegetables

Fresh leaf spinach, spring carrots, braised celery,
jeteé promenade potatoes and wild rice pilaf

Salad

Mixed seasonal salad. Served with a choice of mustard vinaigrette
or passion fruit and almond dressing

Desserts

MR Miniature flan of mirabelles glazed with fresh apricot
Served with double cream

Combination of old fashioned vanilla and mocha ice cream

Fruit

Basket of fresh seasonal fruits

Cheese

A fine selection of English cheeses including Stilton,
mild Single Gloucester and goat's cheese. We also recommend
Rouquette, a new soft country cheese from Germany
and Chavannes from France

Coffee · Tea

Coffee, decaffeinated coffee or tea. Served with Cape gooseberries,
chocolate truffles and pralines

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THE SMOG OF DISAGREEMENT DELAYING A NEW CLEAN-AIR ACT

The Bush Administration has gotten off to a fumbling start on environmental issues, what with its slow response to the Alaska oil spill and its clumsy handling of the potent issue of global warming. But a rewrite of the Clean Air Act is the big one, and George Bush still has a chance to establish himself as an environmentalist.

The Administration's attempt to write legislation with tougher rules on acid rain, toxic air pollution, and urban smog is not going smoothly, however. After more than three months, the effort has produced deep disagreements among top aides. Cost-conscious officials at the Office of Management & Budget advocate a cautious approach. The Environmental Protection Agency is arguing for a more aggressive plan.

Meanwhile, members of Congress and environmentalists are raising questions about how tough the proposal will be. "The President has been saying he wants to be the environmental President," says Richard E. Ayres, chairman of the National Clean Air Coalition, an alliance of environmental groups. "This is the major test. From what I've heard so far, it doesn't look good." Ayres's big fear is that the proposal will give too much weight to the costs of pollution controls and not enough to the health risks.

The White House Domestic Policy Council plans to present a long list of options to Bush in mid-May. Resolution of a number of issues, including targets for reduced smokestack emissions, will be left to the President. That has already forced the White House to delay submitting the proposal to Congress until June.

UNDER FIRE. Acid rain will pose one of the toughest issues for President Bush. On the crucial question of reducing sulfur-dioxide emissions, the President may be presented with proposals ranging from a reduction of 7 million tons to 10 million tons over a variety of time periods. The arguments will come down to how much reduction U.S. industry can afford. There's been a lot of discussion about how to do things

in a cost-effective way," says one White House official.

Aides are also struggling with proposals on toxic air pollutants—mostly carcinogens—and smog. A leaked options paper on toxics drew fire from environmentalists and congressional Democrats because they thought it let polluters off the hook too easily. Administration aides have since rewritten parts of the draft. But most of the options, including the controversial greater reliance on cost-benefit analysis, are still on the table, say Administration officials.



EPA CHIEF REILLY

The Domestic Policy Council—which includes EPA Administrator William K. Reilly, Budget Director Richard G. Darman, and Energy Secretary James D. Watkins—will find some issues it can agree on. There's a consensus to give industry and state governments more flexibility in meeting a variety of emissions goals. That once controversial idea is gaining popularity in Congress.

The Administration is confident that its proposal will be seen as credible. But Bush couldn't have picked a tougher issue to stake his environmental reputation on. Congress has struggled for eight years to rewrite the Clean Air Act, but it has failed to break a tangle of regional interests. This year, the political equation has changed. George J. Mitchell, from acid-rain-soaked Maine, has replaced Robert C. Byrd, from coal-mining West Virginia, as Senate Majority Leader. That has greatly strengthened environmental forces on the Hill.

Bush will get credit for grappling with an issue that President Reagan ducked. But he has some environmental ground to make up first. The Administration's most recent stumble: After vowing during the campaign to lead international efforts to address the problem of global warming, Bush is resisting calls for international action. Looking on the bright side, one Administration official notes that things could be worse. "No matter how bad we're screwing up," he says, "we're not screwing up as badly as Exxon is."

By Vicky Cahan and Richard Fly

CAPITAL WRAPUP

REGULATORS

The latest speculation about a new chairman for the Securities & Exchange Commission focuses on New York commodities lawyer Thomas Russo. But the fact that names continue to bubble up in Washington indicates that President Bush is still not close to naming a successor to Chairman David S. Ruder. Meanwhile, the five-member SEC is rapidly becoming depopulated. Commissioner Joseph A. Grundfest is pondering an open offer to return to the Stanford University Law School this summer. Commissioner Edward H. Fleishman is expected to leave unless he's named chairman. Charles C. Cox's

renomination is moldering in the Senate. And the term of the newest member, Mary L. Schapiro, expires in June.

TRADE

Legislation requiring foreign investors to disclose holdings in U.S. companies is coming back to life in the House. Representative John W. Bryant (D-Tex.) plans to push for a floor vote on the measure within the next month or so. Although the provision has the strong backing of Speaker Jim Wright (D-Tex.), it has been opposed by some powerful committee chairmen. The measure passed the House as part of the 1988 Trade Act but died in a House-Senate conference.

DEFENSE

The surprise announcement of AT&T Bell Labs Executive Vice-President Solomon Buchsbaum that he didn't want a top Pentagon job has sent Defense Secretary Richard B. Cheney scrambling. Buchsbaum cited unspecified "personal reasons" in declining on May 8 to be named Under Secretary for Acquisition. Pentagon aides speculate that Buchsbaum may have been influenced by tough new ethics rules that could severely limit his future employment. Michael P. W. Stone, former Army Under Secretary, has been named acting acquisitions chief and may end up keeping the job.



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THE EVEN-BIGGER SHADOW DAIMLER COULD CAST

As it closes in on MBB, Europe worries about its power

Edzard Reuter has long dreamed of turning West Germany's \$39 billion Daimler-Benz into a sleek, integrated, high-tech giant. Now, with the proposed purchase of Messerschmitt-Bölkow-Blohm (MBB), Reuter may be closing in on his goal, despite last-minute resistance from parts of Germany's business and political Establishment. Daimler is already Europe's largest nonoil industrial company. If Reuter succeeds, it will carry major implications for the rest of the Continent and even for the U.S. aerospace and defense industries.

The tough, wiry 61-year-old Reuter has made large acquisitions in electronics and aerospace since 1985, attempting to ease Daimler's dependence on autos and trucks. But the acquisition of \$3.7 billion aerospace and defense contractor MBB, heavily subsidized by the federal government and partly owned by three state governments, would nail down the transformation of Daimler. In a complicated series of transactions, Daimler would pay \$900 million for a controlling interest of just over 50% in MBB. Overall, Daimler would become a \$43 billion company, with firm stakes in vehicles, electronics, and aerospace (table).

Perhaps the last gasp of resistance within Germany came on Apr. 21, when the powerful Cartel Office blocked Daimler's takeover of MBB on the grounds it would give Daimler a lock on German defense markets. Reuter has lodged an appeal with young Economics Minister Helmut Haussmann, who is now the man on the hot seat. Haussmann has until the end of August to override the Cartel Office on the grounds of superior national interest.

IN A FLAP. It will be a tough call. Large segments of Haussmann's Free Democratic Party, junior partners in Chancellor Helmut Kohl's coalition, are leery of Daimler's seemingly unstoppable rise to power. Besides being Germany's biggest industrial company, Daimler has the country's largest bank, Deutsche Bank, as its biggest single shareholder, with a 28.5% stake. It is easy for populist politicians to hint at dangers of a revival of the huge financial-industrial combines such as Krupp that dominated Germa-

ny in the years before World War II.

Groups of small and medium-size businesses close to Kohl's Christian Democratic Party also fear that with MBB in its embrace, Daimler would be the only buyer of subcontracted supplies and work in aerospace and defense. The Cartel Office estimates that an enlarged Daimler would get over half the \$110 billion in long-term procurement pro-

ject player in making Europe's Tornad strike aircraft and developing the European Fighter Aircraft, sponsored by Britain, Italy, and Spain as well as Germany. And as Europe attempts to dismantle its internal market barriers by 1992, Daimler will raise competitive pressures on the much more fragmented and heavily protected defense industries of other European nations.

Daimler also will assume responsibility for Germany's 38% participation in the four-nation

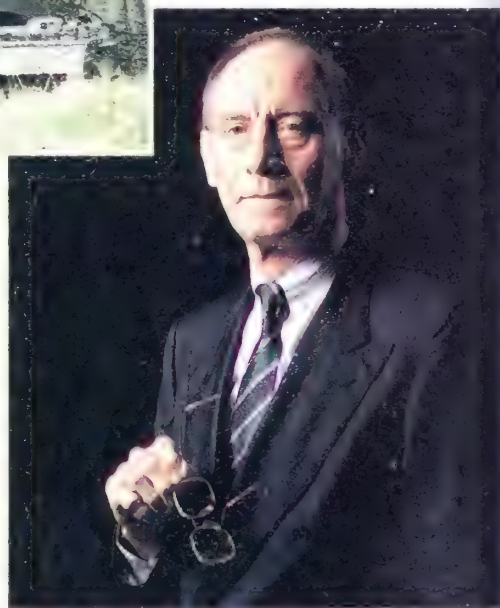


REUTER AND MBB'S LEOPARD TANK: DAIMLER WOULD GET A LOCK ON GERMANY'S DEFENSE MARKET

HOW MBB WOULD ADD TO DAIMLER'S LINEUP

	1988 sales Billions of dollars
DAIMLER-BENZ	
▶ Autos and trucks	\$29.1
▶ Electronic and electrical engineering, appliances	7.1
▶ Aerospace and defense	2.6
MBB	
▶ Aerospace and defense	3.7

DATA: COMPANY REPORTS



grams budgeted by Germany's Defense Ministry, as well as over 60% of its \$18 billion research-and-development effort. Despite these concerns, however, the German government, banks, and corporate leaders are likely to push the deal through.

Daimler's potential clout in defense has other Europeans in a flap, too. "If you want to do defense business with German industry, you'll have to talk to Daimler—there won't be anybody else," warns Piers Whitehead, defense analyst at London brokers Robert Fleming Ltd. Daimler will immediately become a ma-

Airbus Industrie consortium, which has run chronic losses in its battle against Boeing Co. and McDonnell Douglas Corp. British Aerospace, a 20% shareholder in Airbus, is eager to get Daimler's aid in weaning the Toulouse-based Airbus from subsidies and tightening cost controls. "Our whole system has got to be motivated merely by business considerations—by a profit motive," says Adam Brown, Airbus vice-president for strategy.

A revitalized German role in Airbus could trigger new political and competitive spats with U.S. airplane builders

mler will get up to \$2.3 billion of subsidies from the German government over exchange-rate losses on existing programs. But paradoxically, the U.S. will get closer to its longtime goal of ending subsidies from Airbus: Daimler won't get government handouts on new programs, and subsidies on the old will end in 1999.

LY GRAIL. An enlarged Daimler—more than twice the overall sales of United Technologies Corp. and more than either Boeing or McDonnell—has the clout to be a major competitor on many fronts, including tanks, missiles, and helicopters. “Daimler is building one of the most powerful global companies, [with] one of the most technologically advanced products in the world,” says Steven H. Narney, chief international strategist at New York’s Shearson Lehman Hutton. Despite the delay on MBB approval, Daimler is moving ahead to restructure MBB in anticipation of bringing MBB into the fold. On June 28, shareholders are expected to approve Reuter’s plan to turn Daimler into a holding company with three industrial components: Mercedes-Benz to make autos and trucks, a new entity for electronic and electrical engineering, and a new entity called Deutsche Aerospace. This division will be formally launched on May 19, and it is where MBB will wind up, assuming Haussmann approves the deal.

Haussmann says a favorable ruling on Daimler is “not automatic.” But it’s mainly to appease state and local governments and industry bodies. Some of his advisers are less buttoned down. “There is no alternative,” insists Erich Riedl, aerospace coordinator in Haussmann’s ministry. Riedl is also unsparing in his criticism of opponents of the deal, whom he calls “self-appointed keepers of the Holy Grail of the market economy.” What makes the deal seem sure to go through is that it was Bonn’s idea in the first place. The Kohl administration, desperate to stop pouring subsidies into Airbus, wooed several potential marriage partners for MBB, such as electronics giant Siemens and auto company Bavarian Motor Works. But Reuter and Daimler were the only takers. If Europe wants to build giants that can compete against both the Americans and the Japanese, many Europeans feel they have little choice but to allow a wave of consolidations. Reuter’s critics are worried about Daimler’s clout in the domestic German market, but Reuter has his feet fixed firmly on global competition. Despite the display of *angst*, the Germans appear well on their way to creating a giant that will help shape the future of Europe itself.

By John Templeman in Stuttgart, with Mark Maremont in London and bureau reports

Commentary/by Amy Borrus

FOR JAPAN, THE DAY OF RECKONING ON TRADE HAS FINALLY ARRIVED

To hear Japan’s Washington lobbyists tell it, the Bush Administration’s tougher trade policy is courting diplomatic disaster. If U.S. Trade Representative Carla A. Hills highlights Japan for possible retaliation under the new trade law, the lobbyists claim, Tokyo will only become more intransigent. In the end, they say, the whole spectrum of bilateral relations will suffer.

That’s nonsense. Down deep, Tokyo has known for months that Hills has no choice but to act. The trade law’s “Super 301” provision that compels her to select targets was written with Ja-

hardened approach reflects a broader political consensus for managed trade than ever before. With numerous restraint agreements already in place, the temptation to expand managed trade is probably too great to resist.

For example, voluntary curbs already limit exports of Japanese autos and steel. And the 1986 bilateral semiconductor accord between Washington and Tokyo forced Japanese suppliers to stop dumping and abide by quotas.

Letters signed along with the deal also seek to provide American producers a 20% market share by 1991. But Washington and Tokyo disagree over

whether that share is, in fact, guaranteed. The U.S. now has only 10% of the Japanese chip market, a shade more than what it had when the deal was signed.

The Japanese say that U.S. manufacturers lack capacity to ship many more chips to Japan, and that they don’t make enough of the types of semiconductors the Japanese want



U.S. BEEF IN JAPAN: CONCESSIONS HAVE BEEN MARGINAL

pan in mind. But the measure alone is no panacea. Washington needs to start setting firm goals for trade.

The trade law lets the U.S. take such “affirmative action,” and the need for action is clear. Dollar devaluation and a decade of trade talks, tariff cuts, memorandums of understanding, and even sanctions haven’t helped. Concessions Washington won allowing in more U.S. beef and citrus fruit have produced only marginal results. And efforts to slash the U.S. budget deficit to curb consumption and imports have failed because Congress and the Administration are deadlocked over the budget. Hence the calls from many U.S. economists and officials for a “managed” or “results-oriented” trade.

‘REAL ANTAGONISM.’ Simply opening markets won’t overcome Japan’s aversion to foreign products, the managed-trade advocates argue. They say Washington must persuade Tokyo to allocate specific shares of its markets to the U.S. Or the U.S. and Japan should agree on a trade balance—and then let Tokyo figure out what U.S. goods to buy to reach the goal. This

most. But those sorts of arguments have been made many times before. To work, market-share agreements must be specific and enforceable.

NO HEADWAY. Specific, tough measures are needed because Japan is a unique case, where conventional trade policies don’t work. While dollar devaluation has cut the trade deficit with Europe in half in three years, the surplus with Japan hasn’t budged. So it’s up to the trade negotiators to produce results.

Good candidates for such deals would be industries such as supercomputers and telecommunications. The U.S. is clearly competitive in these areas, but neither industry has been able to make much headway in Japan. After five years of a supposedly open door in telecommunications, U.S. suppliers still have only 2.4% of Japan’s market. In telecommunications and other fields, say the trade hawks, it’s enough for now for Japan to know that doors will close in the U.S. if something doesn’t change. The Japanese have long been preparing for such a shock. It has now arrived.

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WITH A LINEUP LIKE THIS, WHO NEEDS CHARISMA?

Reed buys its way to the top in travel guides

In a world of swashbuckling media tycoons, Peter J. Davis, chief executive of Reed International PLC, is a flannel suit. For nearly a year, Davis had one of the richest purses in publishing, with \$1.3 billion in cash and may-

\$2 billion in growing power. It as several major publishers changed hands for record prices, Davis stretched.

No more. In early May, Davis agreed to pay \$825 million for Rupert Murdoch's Travel Information Group, which will make him the largest publisher in the travel industry. His push to make Reed into a \$5 billion publishing giant began shortly after his arrival from supermarket group J. Sainsbury PLC in 1986. His predecessor

had already trimmed the conglomerate, but Davis' solution was to dump three manufacturing businesses supplying half its revenues and use the proceeds to expand publishing operations.

VAL BIDS. This ninety-degree turn required daring. Reed had a billion-plus dollars in the bank and a market capitalization of only \$4.3 billion, making it vulnerable to predators. It was no longer earning the returns on its cash that it relied on its former manufacturing properties, and investors were likely to be concerned.

Davis' first attempts to buy big failed. His friendly offer for Pearson PLC, owner of *The Financial Times*, was rejected. He lost out to Robert Maxwell in auction for Official Airline Guides Ltd., the U.S. counterpart to Reed's ABC World Airways Guide. So Reed splurged on smaller deals, buying British newspapers and U.S. trade magazines. The purchases made Reed's *Cahners Magazines* the leading U.S. trade publisher. Davis talked with Murdoch for a year about the Travel Information Group. Su-

perficially, Murdoch got the better deal, paying \$340 million for the company in 1984 and now selling it for more than twice that amount, at a steep 29 times net earnings. But the buy gives Reed the leading U.S. hotel directory and enough trade magazines to make it No. 1 in travel publishing.

Davis intends to expand his new company by selling the *Hotel & Travel Index* beyond its U.S. base and by bringing the ABC airline guide into the U.S. He is also thinking of putting color-picture descriptions of hotels on travel agents' computers through airline reservation systems.

Reed has now used up its cash, which "takes the pressure off," says Davis. Analysts figure its earnings,

now about \$470 million, will start to pick up next year. More importantly, Reed has been transformed into a world leader in publishing in just three years. For Davis, that seems recognition enough.

By Mark Maremont in London



DAVIS BUILT A MEDIA GIANT IN 3 YEARS

BRITAIN

SHAKEUP AT GLAXO

A new CEO is readying a global R&D and marketing push

For years now, Britain's Glaxo Holdings PLC has wrestled with the problems of success and succession. With Chairman Paul Girolami at the helm, the company has grown in the 1980s from a midsize European pharmaceutical company to the global No. 2, behind Merck & Co. Glaxo's secret: Zantac, an anti-ulcer drug. But rivals and inves-

tors always asked the big question: How would the company sustain its growth, and who would lead the charge?

Now, Glaxo is coming back with clear answers. In a stunning shakeup on May 9, Girolami tapped Ernest Mario, head of the company's North and South American operations, to be Glaxo's new chief executive and heir apparent as chairman. Mario, 50, was elevated over chief executive Bernard D. Taylor, who immediately resigned. The appointment of Mario, an American known for his marketing skills, signals the company's strong commitment to pushing a whole range of new drugs more aggressively worldwide. Says Mario: "We will forgo some of the spectacular earnings growth to pour more money into research and marketing."

SPEED IS KEY. The shakeup came only days after Glaxo revealed details of 25 new products in its research-and-development pipeline. Among them are three potential big sellers—drugs to attack migraine headaches, the nausea linked to cancer treatments, and asthma. To develop these drugs quickly, Glaxo plans to boost R&D spending 32% over each of the next two years. This year alone, it will spend \$500 million on R&D in the U.S., Britain, Italy, and Japan. Getting the new products out fast is critical: Zantac represented nearly 50% of Glaxo's 1988 sales of \$3.4 billion and even more of its \$1.4 billion in pretax profits.

Equally important, Mario plans to beef up Glaxo's worldwide marketing. He will increase Glaxo's sales force by two-thirds, to 5,000 over the next five years, and allow subsidiaries to tailor their sales plans to their own countries. That "entrepreneurial" approach, as Mario calls it, helped Glaxo score big in the U.S. Under Mario, who joined Glaxo in 1986 after nine years at Squibb Corp., U.S. sales rocketed threefold, to \$1.6 billion. The company beat back competition from Tagamet, SmithKline Beckman Corp.'s anti-ulcer drug.

Mario's trickiest task may be maintaining smooth relations with Girolami, 63. The chairman has a reputation for being domineering and has clashed with other Glaxo executives, provoking several departures. Before accepting his new job, Mario exacted a promise that he would be given free rein and that all other executives would report to him. "I told him you cannot expect me to do this unless I have all of the pieces," he says. Mario, with his easygoing style, may be more successful than his predecessors in dealing with the boss. He'll have to be: Girolami doesn't have to retire for seven more years.

By Richard A. Melcher in London, with Joseph Weber in Philadelphia

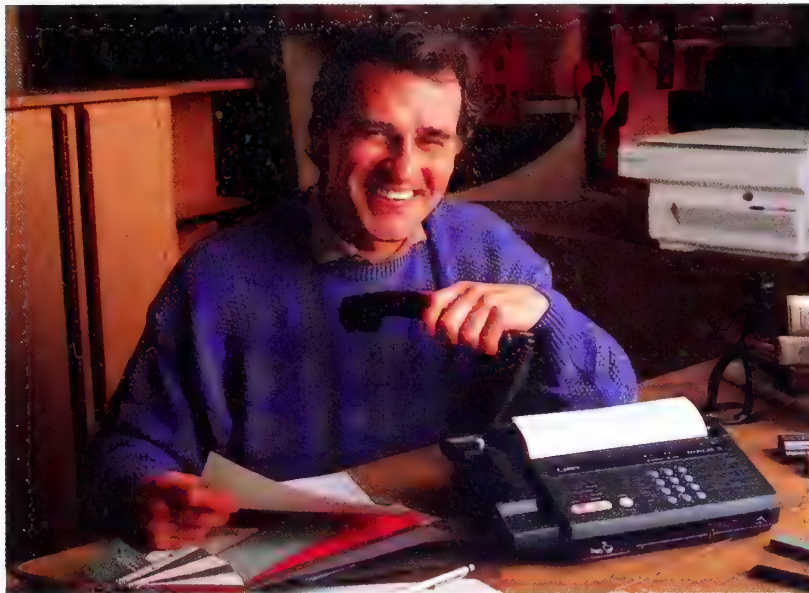
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HOW BUSH MAY HELP OPEN THE DOORS WIDER FOR SOVIET JEWS

When Congress passed the Jackson-Vanik Amendment in 1974, it created a carrot and stick to help win freedom for Jews to leave the Soviet Union. The law penalized Soviet exports to the U. S. but offered Moscow better trade treatment in return for expanded emigration. In practice, the result has been an erratic outflow: From 51,320 Jews in 1979 to just 896 in 1984, compared with 34,733 in 1973. Now, in a significant change of policy, President George Bush is expected to try wielding the amendment as an incentive rather than as a punishment. By waiving trade penalties for 18 months, Bush would reward President Mikhail S. Gorbachev for having allowed a steep rise in Jewish emigration—to an annual rate of 42,000 so far this year (chart). The outflow will accelerate as Jews make use of 57,000 exit permits granted since January. And by holding out the prospect of future extensions of the waiver, Bush would encourage Gorbachev to open the door even wider.

NEW LAWS. For Bush, lowering U. S.-Soviet tensions by means of a waiver would help pave the way for a summit with Gorbachev later this year. Major U. S. Jewish groups are likely to concur with Bush's actions. They believe that the Soviets will take significant action to make immigration rights permanent by embodying them in new laws. During Secretary of State James A. Baker's May 10-11 visit to Moscow, Soviet officials indicated that they will decree legislation to clarify and institutionalize emigration rules before May 25, when the new Soviet congress will convene. U. S. Jews have been calling for such a codification to alleviate their fears that the emigration gates could slam shut again.

An earlier chance to spur Soviet emigration was lost, many Jews believe, when U. S. Jewish organizations failed to call for a Jackson-Vanik waiver in response to the big 1979 outflow. Now, although the amendment refers only to emigration, Gor-

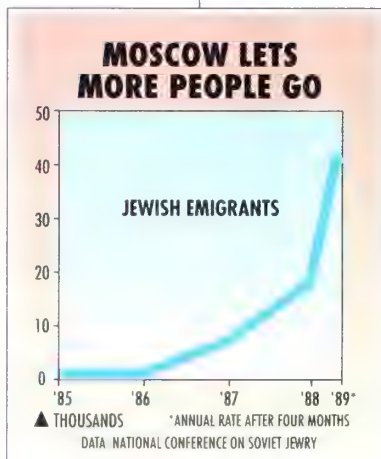
bachev has also improved conditions for Jews within the Soviet Union. Edgar M. Bronfman, chairman of Seagram Co. and president of the World Jewish Congress, is one leader who is urging U. S. Jews not to miss the current opportunity. "The Soviets have done everything Jackson-Vanik calls for—and more, in terms of internal treatment of Jews," Bronfman says. "If I can't sell [a waiver], I'm a lousy salesman."

So many Soviet Jews are now heading for the U. S., in fact, that there are problems absorbing them. And Gorbachev's easing of curbs on religion and Jewish culture is stirring a new U. S. debate: Should Soviet Jews be entitled to enter as refugees, if they no longer are fleeing a "well-founded fear of persecution?" Applying that criterion, specified by U. S. law on a case-by-case basis, U. S. immigration officials are now denying refugee status to some Soviet Jewish émigrés. Instead, they are being offered a special status that allows them to enter the U. S. without official financial aid or the right to future citizenship. At Ladispoli, a transit area near Rome, around 10,000 Soviet Jews are waiting for U. S. visas. To catch up with the backlog, the Administration and Congress are expected to boost the ceiling

allow about 30,000 Soviet Jews to enter as refugees this year.

Longer term, if Gorbachev's *glasnost* continues, the U. S. seems likely to classify most Soviet Jews like other prospective immigrants—by contrast with Israel, which wants as many as it can attract. Bronfman expects that the Soviets will let Israel open a consulate in Moscow and start issuing visas possibly by next summer. Then, Soviet Jews who prefer the U. S. over Israel, as many do, will join a lengthening list at the American embassy of Armenians and other would-be immigrants to the U. S. That would be one more sign that U. S. Soviet relations are normalizing.

By Rose Brady in New York and Bill Javetski in Moscow



GLOBAL WRAPUP

BRITAIN

On the heels of Margaret Thatcher's 10th anniversary as Prime Minister, the Labor Party is trying once again to tone down its election-losing left-wing image. Party leaders endorsed the results of a policy review that gives a lukewarm embrace to market capitalism and moderates the party's vow to renationalize industries sold off by Thatcher. Only British Telecommunications PLC and the soon-to-be privatized water authorities are targeted for early return to public control.

The key test of how far Labor has moved will be a proposal to abandon its controversial call for unilateral nuclear

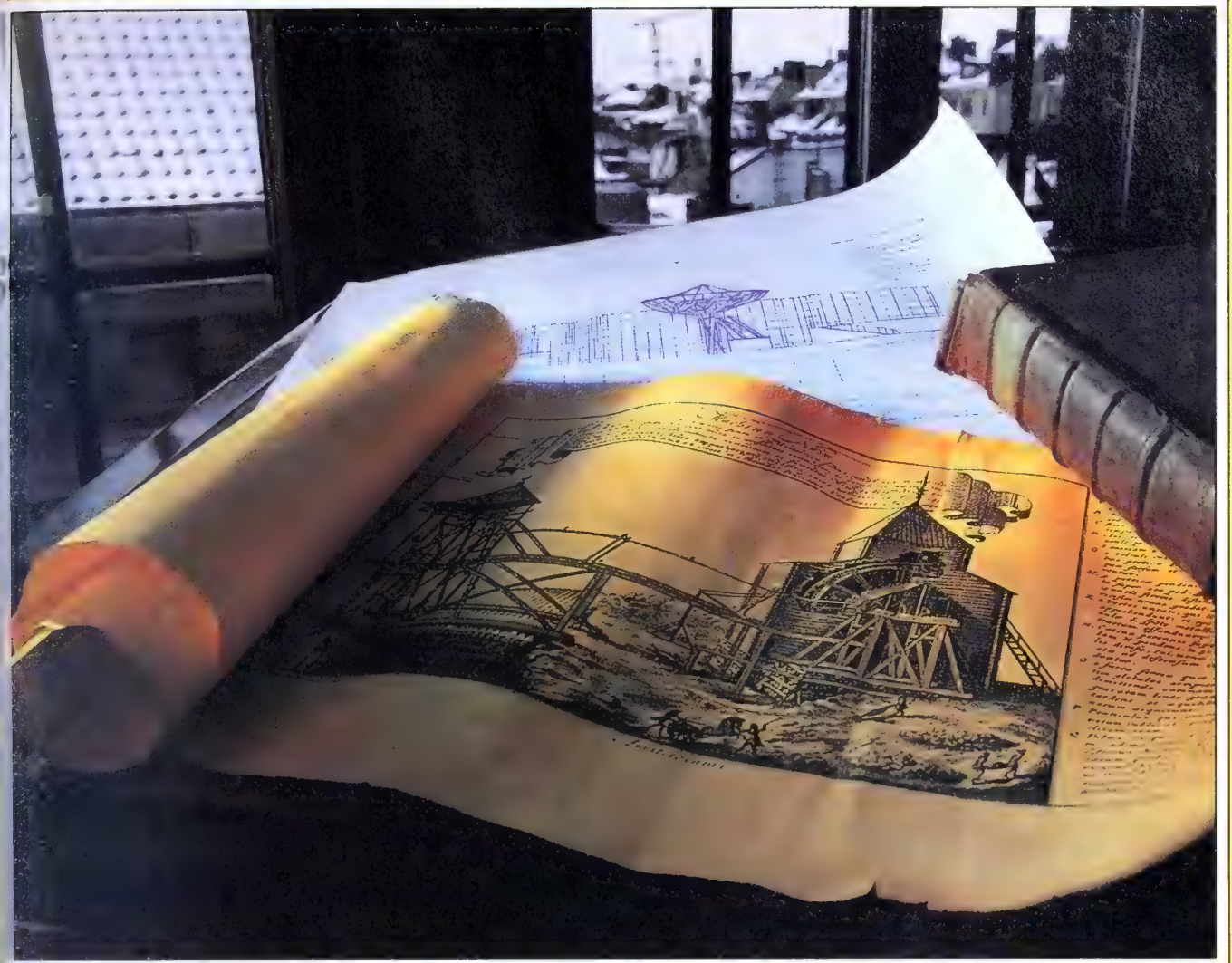
disarmament. This issue will stir the hottest battle at next fall's convention, which must ratify the new positions. Ironically, Labor is trying to shed its nuclear albatross just when Thatcher faces international criticism for trying to block short-range nuclear disarmament in Central Europe. Labor hopes that East-West détente will progress so far by the early 1990s that Britain may be able to negotiate away its weapons in multilateral talks.

MEXICO

By firing 23,000 striking Mexico City bus drivers and dissolving their bus company on May 3, President Carlos Salinas de Gortari refurbished

his tough-guy image—somewhat tarnished by a three-week teachers' walk out. The crackdown, in the midst of crucial talks with foreign creditors, aims at deterring other unions from undermining Mexico's economy by following the teachers' example.

Salinas' muscle-flexing set the stage for a restructuring of the bus company. The city reinstated the drivers with a 14% pay hike—far less than their 50% demand. But after six months the company will become a cooperative—the city will continue to manage the business, but the drivers will own a chunk of it. That will give workers an incentive, Salinas hopes, to help slash the buses' \$200 million annual deficit.



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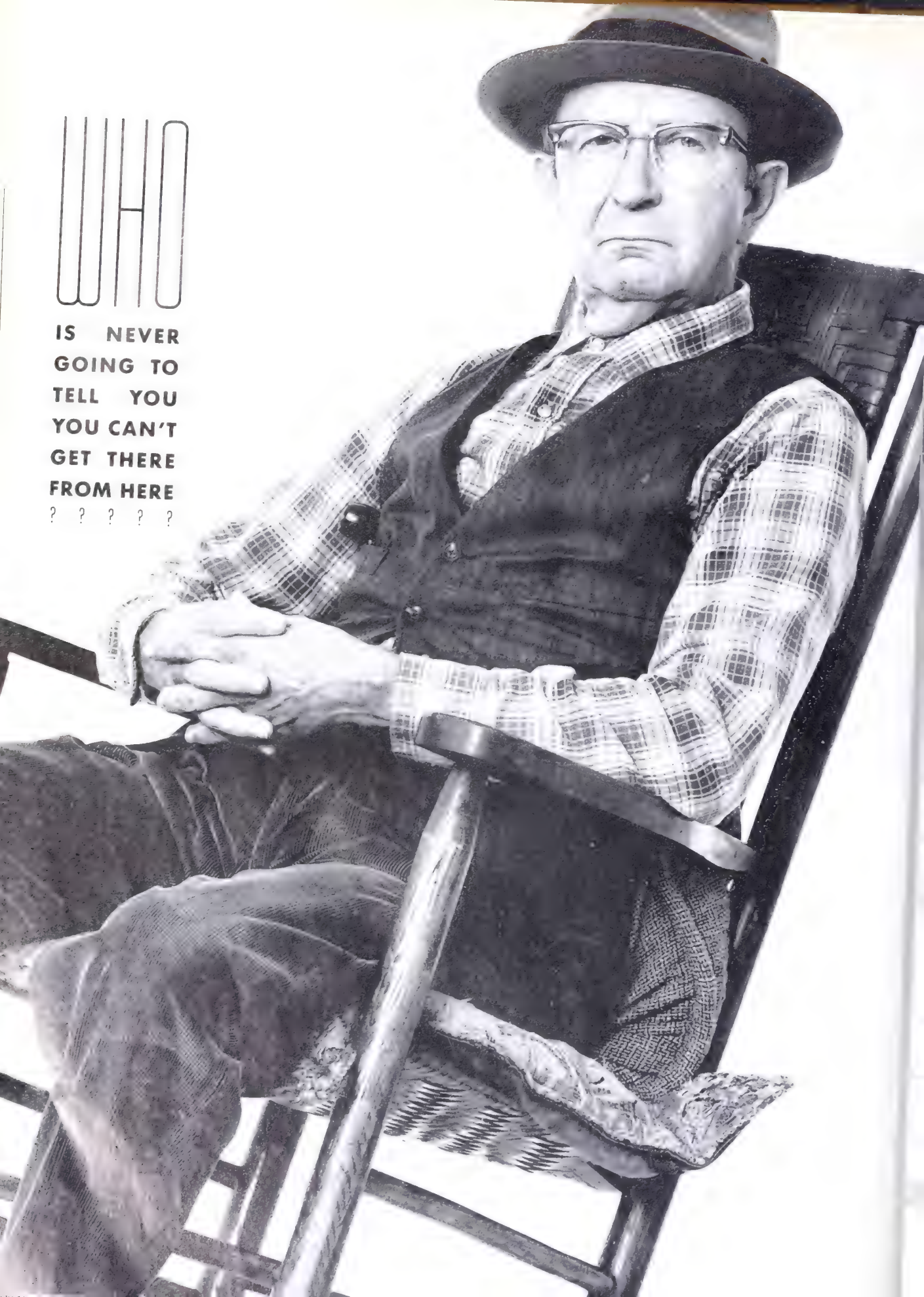
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FRITO-LAY'S COOKING AGAIN, AND PROFITS ARE STARTING TO POP

With rival Borden in hot pursuit, the No. 1 snackmaker has spiced up its product line

Few companies have dominated an industry the way Frito-Lay Inc. has ruled snack foods. But for a while, the company seemed to lose its touch. Three years ago, it went on a disastrous new-product binge that produced such unmemorable footnotes to snack food history as Stuffers cheese-filled snacks, Rumbles granola nuggets, and Toppels cheese-topped crackers—or as one analyst called them, Stumbles, Tumbles, and Twofers. The products did not survive.

The misguided foray into nonsalty snacks cost the PepsiCo Inc. unit precious momentum, which it has just begun to regain. It didn't help, either, that Elsie the Cow has been giving Frito-Lay some kicks in the shins. Borden Inc. has built the only other national snack food network by acquiring 10 regional companies in the past decade, including Snacktime Co. in the Midwest and Laura Scudder's Inc. in the West. Borden's snack

Snacktime acquisition in 1987—have become the leading hard-and-crunchy, kettle-cooked brand and an important entry in the fast-growing premium potato chip segment. Borden's Cottage Fries and New York Deli chips, which also originated as regional offerings, are likewise doing well in national rollouts.

Premium-priced products such as kettle-cooked chips have grabbed 5% of the \$3.8 billion retail potato chip business. Frito-Lay has barely made a dent in the

Many of the items got lost on store shelves, and sales failed to take off. "They believed they could just dream up new products and, with their sales and marketing muscle, foist them onto the American consumer," says Walter Schaeffer, president of DSD Management, a route-sales consulting firm in Orange, Calif. The frenzy caused a 13% decline in operating profits. It also led to the resignation of President Willard Korn and the naming of then-PepsiCo

CHIPPING AWAY AT FRITO-LAY

	1986	1987	1988
U.S. POTATO CHIP MARKET	Billions of dollars*		
	\$2.20	\$2.23	\$2.30
MARKET SHARE	Percent		
FRITO-LAY	40.0%	40.0%	37.5%
BORDEN	11.0	11.0	14.6
PROCTER & GAMBLE	7.0	8.8	9.0
ALL OTHER BRANDS	42.0	40.2	38.9

*Based on factory sales

DATA: INDUSTRY SOURCES, BW ESTIMATES

sales are still less than one-third of Frito-Lay's \$3.5 billion. But Borden represents the most aggressive adversary Frito-Lay has faced on a national scale.

In a business where new products are the key to growth, the once-sleepy dairy company has outshined Frito-Lay in several key categories. Its Krunchers! potato chips—which came with Borden's

category, despite owning the top two potato chip brands, Ruffles and Lay's. Frito-Lay struggled with a kettle chip called Kincaid before pulling it off the market in 1987. It is now testing a reformulated version, Lay's Crunch Tators.

Kincaid was part of the new-product barrage that overloaded Frito-Lay's legendary 10,000-strong sales force in 1986.



LIGHT MAKES RIGHT: FRITO-LAY'S NEW, LOW-FAT SNACKS COST LESS TO MAKE

President Michael H. Jordan as head of newly formed PepsiCo Worldwide Foods, based in Plano, Tex.

Jordan quickly killed most of the brands from the class of '86 and shifted development to more traditional snacks—with much tastier results. Frito-Lay is busily cooking up new flavors and successful core products. Two years after the launch of Cool Ranch Doritos tortilla chips, the flavor accounts for one-quarter of the \$1 billion in retail sales for the entire Doritos brand.

Now, the company is launching lo-



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Marketing

fat versions of Doritos, Ruffles, and Chee-Tos cheese puffs. Frito-Lay researchers developed a reduced-oil cooking process and a special corn to make sure the new light snacks taste as good as chips and puffs with all the extra grease. They didn't want to make the same mistake as Borden, whose low-fat potato chips flopped a few years ago because they didn't taste very good.

Jordan also has concentrated on cost savings. He supported low-oil production in part because their lower ingredient costs meant higher margins. He also pushed microwavable and chunky sales dips, which take advantage of Frito-Lay's distribution without the need for expensive marketing support. Unlike other new products, the dips don't need additional retail space; they sit in wire baskets hanging from existing shelves.

The company is turning to acquisition to fill some gaps in its product line. Frito-Lay has been a latecomer to the popcorn market, which is growing 25% a year, compared with 4% for all salted snacks. In January, Frito-Lay paid \$14 million for Smartfoods Inc., which makes a cheddar-cheese popcorn sold in the Northeast. The company plans to expand the brand nationwide.

SQUID BALLS. Despite the inroads by Borden, PepsiCo officials appear satisfied that Frito-Lay is cooking again. The company just announced a 26% jump in snack food operating profits, to \$155 million for first-quarter 1989, coming off a year when profits rose 16%, to \$636 million on \$3.5 billion in sales. "Mike has certainly put a lot of momentum back in the business," says PepsiCo Chairman D. Wayne Callaway. With product development and cost-cutting on track, Callaway recently named Robert H. Beeby, who headed Pepsi Cola's international unit, as Frito-Lay president. "They need to look at more marketing and sales opportunities, in which Mr. Beeby has great expertise," says Peter M. Duggan, group vice-president for Borden Snacks.

Frito-Lay is also chasing foreign sales. International profits are rising 20% a year on revenues topping \$500 million, including Frito-Lay's share of joint ventures. The company hopes to be in 20 countries in five years, up from 20 now.

While potato chips seem to have universal appeal, not all tastes translate. In Korea, Frito-Lay's international unit sells a wheat, squid, and peanut ball called Cuttle Fish. Squid snacks aren't likely to turn up next to the low-fat Doritos at your local 7-Eleven. On the other hand, who knows? Frito-Lay's taste technicians must keep innovating, and American chip-chompers will look elsewhere to feed their habits.

By Amy Dunkin in Dallas

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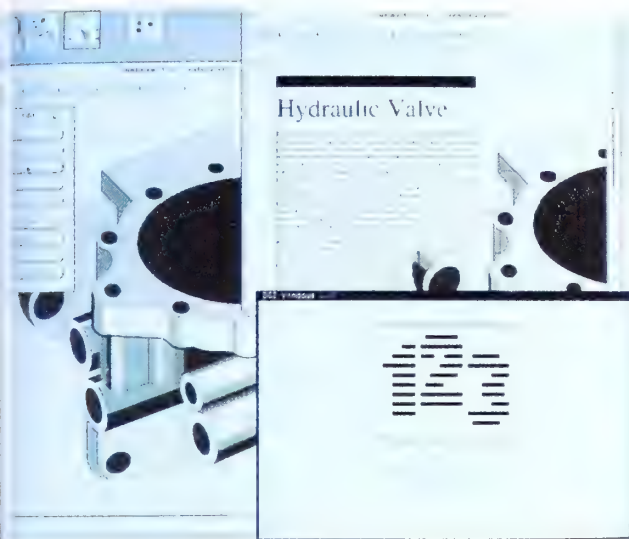
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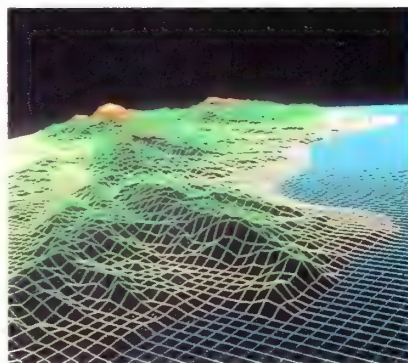
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Social Issues

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WHY MORE MOTHERS ARE NOT GETTING MARRIED

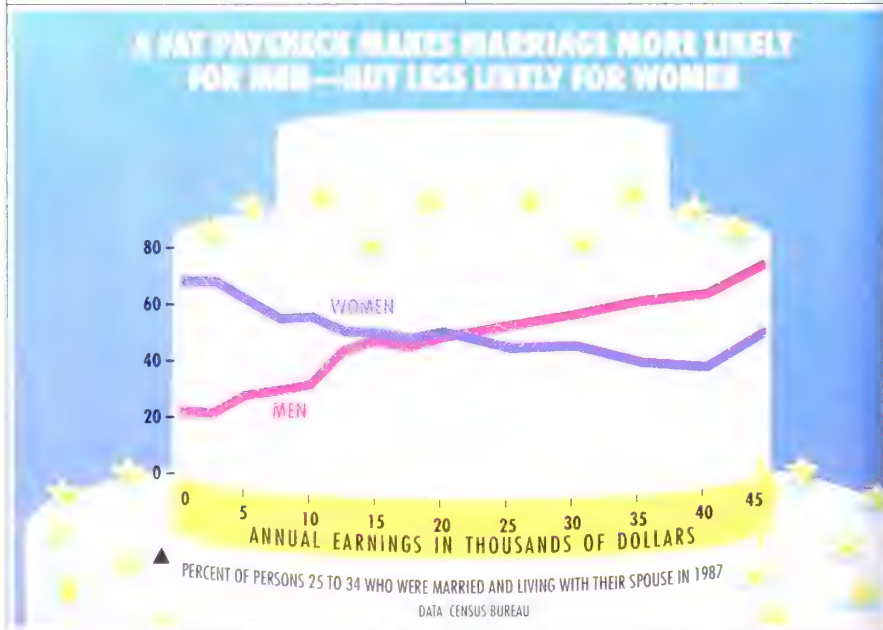
New studies—focusing on young men—say it's economics

After Andree R. Wickman left her husband of 10 years last year, the 30-year-old mother of three found herself—like many single mothers—on welfare. After several months at a near-minimum-wage job, the Ocala (Fla.) resident landed work at a crisis center that pays \$6.50 an hour. That may not sound like much, but it's more than double the average earnings of the typical single mother. As a result, although Wickman still gets a temporary state child-care subsidy, she no longer needs a man to support her. "I will never marry for economic reasons," says Wickman. "And if I do marry, I'll have my own home and car and life. I will never be dependent on another human being again."

Wickman's financial struggles are typical of the plight of many single mothers. Their growing ranks have contributed to a host of social problems, including greater inequality of family income and increased poverty among women and children. Observers trace the increase of single mothers to the social changes that began in the 1960s: the pill, abortion, the sexual revolution, and the acceptability of divorce. But everyone agrees this is not the whole story.

Now some experts have advanced controversial—and startling—theories that turn the whole issue on its head. Instead of focusing on women, they're looking at men. They say that many young men can't afford to get married anymore. In general, men who earn more are more likely to marry (chart). But because the real average incomes of young men has fallen since the 1960s, a growing number don't earn enough to support a family. They delay marriage for years, leaving more women to fend for themselves even if they have a child. In addition, many women are more independent. They tend to marry less as their income rises. Because more women work, a growing number are in Wickman's situation: They can support themselves and choose to remain single.

VIOLENT DEATHS. "Many men feel that they assume responsibility for supporting a child, they must be able to make good on the promise," says Clifford M. Johnson, youth employment director at the Children's Defense Fund, a Washington-based lobbying group. And many women "have new opportunities to support themselves, which may give them fewer incentives to marry," says Reynolds Farley, a University of Michigan



Professor now at the Census Bureau. No one claims that money is the root of all marriages or divorces. But falling living standards have altered a once-implicit financial contract: The men made money, and the women raised the kids. As these traditional roles unravel, the problems of single mothers are becoming more intractable. The conservative Charles Murray created a controversy in 1984 when he suggested that liberalizations in welfare rules and more permissive values have made out-of-wedlock births more acceptable. Murray still thinks he's right, but he agrees the new economic arguments have merit. And if they do, tough-minded social policies may not slow the rise in single mothers. The idea that economic trends have pressed marriage rates was first suggested as a reason why black ghetto mothers choose welfare over marriage.

In 1988, William J. Wilson, a University of Chicago sociologist, pointed out that there just aren't enough men around for black mothers to marry. In the past two decades, the pool of young black males available to support a family has dried up as more of them go to prison, die of violent deaths, or are unemployed. Wilson constructed what he called a "male marriageability pool" index, which compares the proportion of employed men to women of different ages and races. It shows that the number of employed nonwhite men age 20 to 24 per 100 nonwhite women of the same ages plummeted from about 70 in 1960 to less than 50 in the early 1980s. "A lot of jobs have gone," says Jim Clark, director of Project Independence, which provides job training for 20,000 Florida welfare recipients. "For many young women with children, the father is unemployed and generally not desirable, and doesn't want to marry them anyway."

HARDEST HIT. Farley thinks that black marriage trends may presage white ones. He points out that the average age at marriage began climbing for blacks in the 1950s, as did out-of-wedlock births and the proportion of children in single-parent families. Similar patterns began among whites in the 1960s.

For many young whites, the problem is low-paying jobs rather than joblessness. In inflation-adjusted dollars, the mean annual earnings of white males age 18 to 29 dropped by 18% between 1973 and 1986, according to Census Bureau data. This has pushed more men into lower pay brackets, which makes them more likely to delay marriage.

Hardest hit have been men with little education, whose marriage rates have fallen the most. In 1973, the average high-school dropout got a full-time job at the age of 22. Today, many dropouts bounce around from one part-time job to the next and don't land steady

work until they're 26, according to Northeastern University economist Andrew M. Sum. In inflation-adjusted terms, the mean annual earnings of young male dropouts age 20 to 24 plunged 42%, to \$6,852, between 1973 and 1986, Sum found.

If dropouts do marry, many start family life in dire circumstances. The poverty rate among young married couples headed by a male dropout under 25 shot up from 15.5% in 1973 to 30% in 1986. These days, most such young people put off marriage. Fifteen years ago, a majority of male dropouts married by age 22. Today, they wait until they're 27.

The grim statistics leave a large question unanswered: Why don't women delay children until they can form a family to support them? Many women do. The average woman today doesn't have her first child until she's almost 24. But an increasing number of women, especially poor ones, realize that they may never

'For many young women with children, the father is unemployed and generally not desirable'

find someone to help them raise a child. So they have them anyway. And because so many older unmarried women are having children, teenagers account for only 20% of single mothers today vs. 50% in the 1970s, says Sum.

Women also may be having children before marriage because of the independence that comes from a job. Critics say Wilson assumes that marriage decisions revolve around male earning power. But with more women working, even relatively low-paid women like Wickman can manage to bring up children themselves.

Heidi I. Hartmann, the head of the Women's Policy Research Institute in Washington, devised what she calls the "women's self-support index" to illustrate the point. Hartmann compared the ratio of employed women to employed men and found that women's economic independence has grown steadily in recent years. "Women's employment has been increasing more rapidly than men's," says Hartmann. "So more women can say, 'If a man drinks or is violent or abusive, why bother?'"

It's impossible to sort out how much of the rise in single mothers stems from economics as opposed to changing social mores. But since income clearly plays a decisive role, the solution to the problems of single mothers may elude society for many years to come.

By Aaron Bernstein in New York

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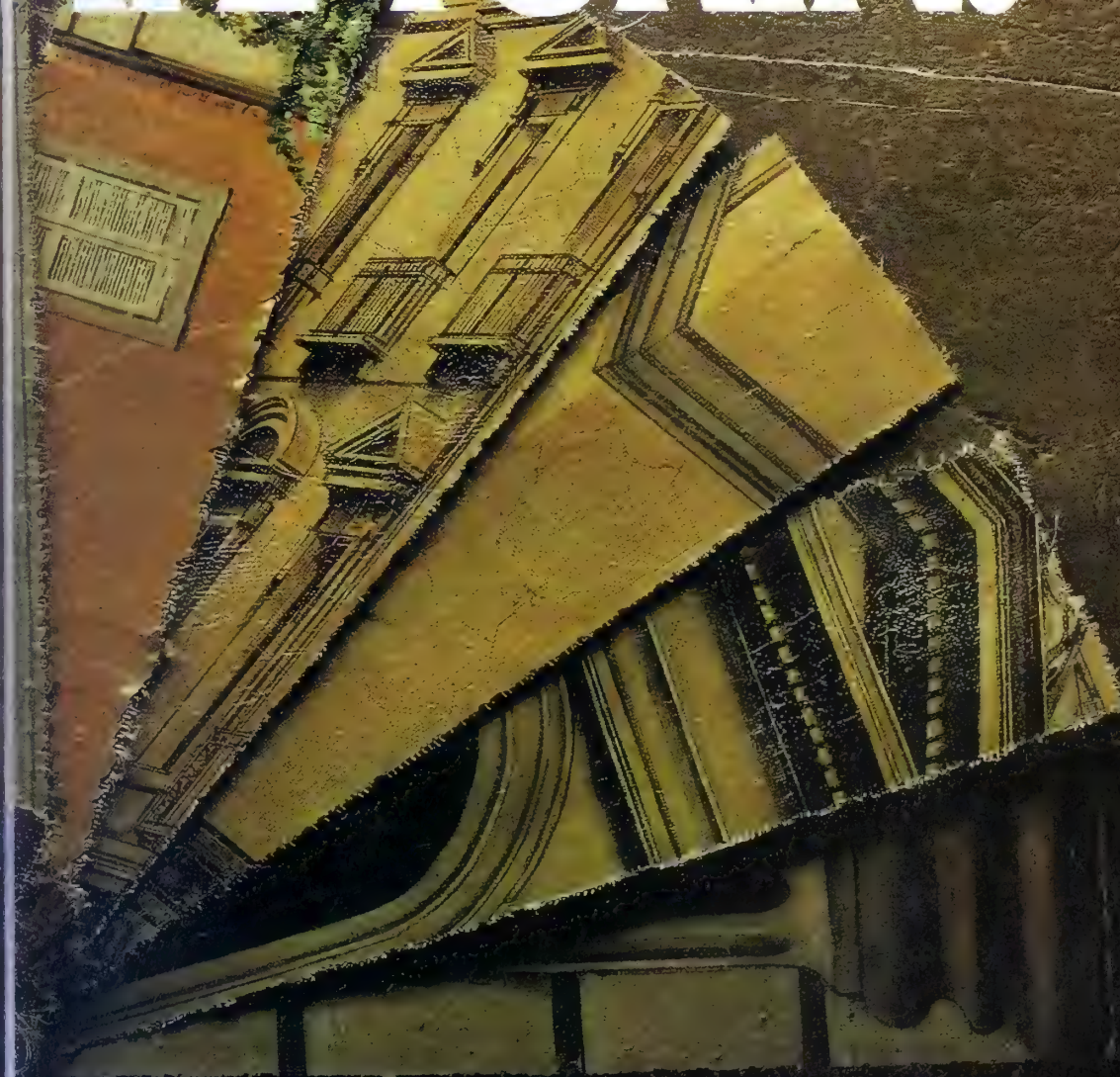
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THE BATTLE RAGING OVER 'INTELLECTUAL PROPERTY'

Patents, copyrights, and trademarks are potent competitive weapons

In late 1987, top officials of Genetics Institute Inc. gathered at company headquarters in Cambridge, Mass., to settle a critical issue: which version of a new clot-dissolving drug to bet on. With money to develop just one of four potential products, the company's scientists argued for the one that had shone in research. Then the attorneys weighed

rights. Now, companies are using those rights as potent competitive weapons. In 1988, some 6,059 intellectual property suits were filed in the U.S., 60% more than in 1980. Whether it's Walt Disney Co. protecting Snow White or Polaroid Corp. guarding its instant cameras, hardly a week passes without property rights issues being raised, and not just

neurs who trigger innovation. "We're pressured to create new property rights all the time now," says Representative Robert W. Kastenmeier (D-Wis.), whose House Judiciary subcommittee plays a pivotal role in intellectual property legislation. "But there is a danger in giving too much leverage to one side."

Until the 1980s, infringers had the

GUARDING GOOD IDEAS

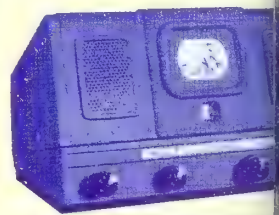
The legal concept of intellectual property has thrived, been ignored, and risen again as the country has readjusted its global outlook



1787 Constitutional framers adopt Article I, Sec. 8, granting monopoly rights for a limited time to owners of "new and useful ideas." Thomas Jefferson is named first Commissioner of Patents



1800s Congress, favoring property owners, strengthens patent and copyright laws. This helps bring the Industrial Revolution to the U.S.



1950s Since America nates world m intellectual-property rights seem important. Justice Dept. brings trust suits against companies aggressively enforce their patent

in. They pushed a drug that hadn't tested as well but would command the broadest patent. And they won hands down. "Researchers used to be up in arms if such crass decisions were made," says Bruce M. Eisen, GI's patent counsel. But now, "the strength of the potential patent position is a leading factor in what research to pursue."

Intellectual property—the umbrella term for patents, copyrights, trademarks, and trade secrets—once was the backwater of American business. No more. From Hollywood to Hong Kong, the fruits of inventive minds are regarded as a company's most valuable asset and the one most vulnerable to theft—perhaps \$61 billion by foreign competitors in 1986 alone, according to the U.S. International Trade Commission.

With that kind of money on the line, everyone is more vigilant. Since 1983, Congress has quietly passed 14 laws strengthening intellectual property

in court: Patent holders are dramatically raising revenues by hiking license fees.

"The change in recent years has been profound," says Herbert F. Schwartz, a partner at New York's Fish & Neave who helped Polaroid force Eastman Kodak Co. to leave the instant camera business. So much so that even in the most prominent law firms, no-name patent attorneys are becoming stars (page 82).

The defense of intellectual property rights has gotten so aggressive, in fact, that some experts fear the pendulum may swing too far—and stifle entrepre-

A newly created appeals court, which is upholding patents 80% of the time, 'got the revolution going'

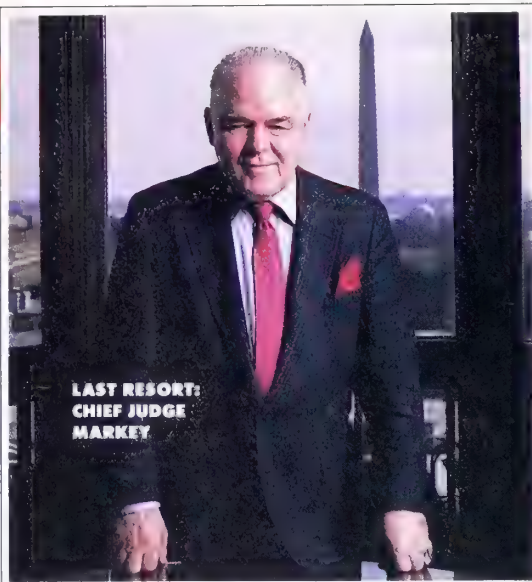
edge. Courts tended to invalidate patents by ruling that the application was improper or that an invention didn't meet the law's requirement that it be "nonobvious." Even when a patent holder won, the prize was usually just royalties from the infringer.

That began to change with Ronald Reagan. In 1980, his Justice Dept. softened its policy of using antitrust law against companies that aggressively protected their patents by refusing to license their technology, for instance, by charging one competitor more than another. About then, companies also began lobbying for tougher enforcement of intellectual property laws to fight foreign competitors. Lawmakers listened. "A few years ago, hardly anyone knew what intellectual property meant," says Pfizer Chairman Edmund T. Pratt Jr. "Now, just about our entire Congress is fully supportive."

That has been a boon for many indu-

es. Last year, for instance, Congress strengthened copyright law by tifying the Berne Convention for e Protection of Literary & Artistic orks. It calls for reciprocal copy- ght protection with 77 other coun- es and puts the U.S. on firmer ound when it prods these coun- es to prosecute illegal copiers of ftware, for instance, or films. The aty was written in 1885 but not ified by the U.S., partly because ngress wanted other countries to n on to the provisions of Ameri- n law.

The U.S. signed just in time. rothy Schrader, general counsel e the U.S. Copyright Office, says ne will be a particular boon to e software and entertainment indus- es, where satellite transmission and ecocassette recorders smoothe the way piracy that costs American compa-

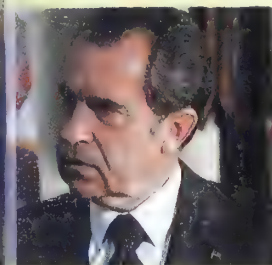


**LAST RESORT:
CHIEF JUDGE
MARKEY**

ard T. Markey, an expert in patent law, the new court is upholding patents 80% of the time, vs. 30% under the previous system. "The Federal Circuit got the revolution going," says Michael W. Blommer, who heads a trade association

for higher royalties. Typically, such payments used to be 1% of revenues, enough to produce some income but not to prompt a court challenge to the original patent. But in 1987, Texas Instruments Inc. decided to raise its royalties on memory chips—some to 5%. Nine companies that balked, including NEC, Matsushita, Fujitsu, and Mitsubishi Electric, found themselves in court on patent infringement charges. Soon, they accepted the higher fees, which in the past two years have produced \$281 million in income for TI. With research-and-development spending running "orders of magnitude higher" than in the past and new chip plants costing \$100 million a pop, says TI Senior Vice-President Kevin J. McGarity, higher licensing fees are one key to survival.

Other companies are following TI's lead. One call for advice, says a TI insid-



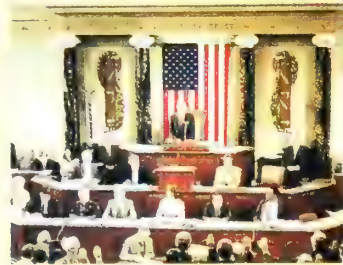
1982 First reported manufac- turing trade deficit rings Washington and board- and refocuses attention on in- property. But Congress fails d Asian imports grow



1982 Congress creates Court of Appeals for the Feder- al Circuit to handle all patent appeals. The court, aided by new Justice Dept. policies, swings the legal pendulum back in favor of patent holders



1986 Patent litigation ex- plodes. Federal Circuit forces Eastman Kodak out of the in- stant camera business for violating Polaroid's patent. Other judges follow the court's lead, upholding patents



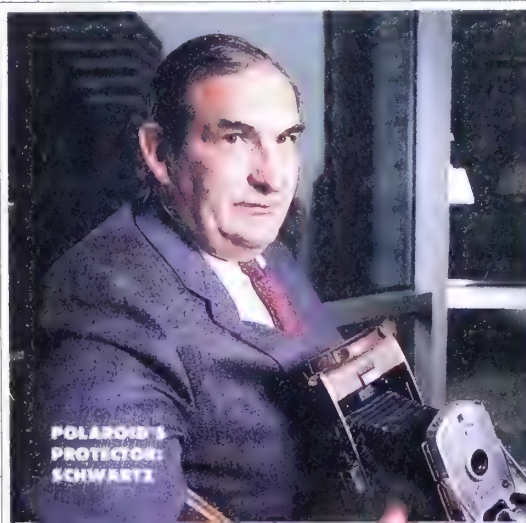
1988 President Reagan signs landmark trade bill givin- property holders strong leverage in ir ternational trade. This brings to 14 th number of intellectual property laws Congress has passed in five years

s some \$1 billion a year in revenues. While mulling over Berne, Congress o overhauled U.S. laws governing demarks—the names, words, or sym- ls used to distinguish products such as ckey Mouse. When the new law takes ect this November, companies will e able to reserve a trademark be- e it is used commercially and thus t-market names without fear of ing them.

ESHER BENCH. But Washington's st important move predates such anges. In 1982, Congress created e U.S. Court of Appeals for the deral Circuit in Washington, a rt of last resort for patent cases. e idea was to avoid contradictory isions often issued by the 12 ex- ing Courts of Appeal and seldom tangled by the Supreme Court. In- ed, the high court typically nned convoluted patent cases al- gether. Under Chief Judge How-

of patent lawyers. "Now, businesses can count on patents to mean something."

Just ask Polaroid, whose victory over Kodak was upheld by Markey's court. Emboldened by that slam-dunk, other patent holders are squeezing licensees



**POLAROID'S
PROTECTOR:
SCHWARTZ**

er, came from IBM, which threatens to punish any company that clones its three-year-old Personal System/2 computer. With the PS/2's predecessor, the PC, there were no new technologies for IBM to patent, though it did aggressively pursue companies that illegally copied software known as the ROM-BIOS. But software developers quickly came up with legal duplicates of the ROM-BIOS, and IBM's share of the PC market soon fell by one-third.

IDEA TRADING. Now, IBM is taking no chances. It has applied for patents on key hardware designs for the PS/2 and has been negotiating patent licensing agreements with competitors that have not already exchanged patents with IBM—a custom common in the industry. IBM also raised its patent licensing fees last year so that companies without patents to offer in exchange could wind up paying a 3% to 5% royalty on

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The Golden Gate Bridge,
photographed by Alan Ross

dation of experience. It enables us to look at goals with a long-range perspective. To see

opportunities that may not be clear to others. And to deliver the support you need to seize them.



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every PC or PS/2 clone they sell. Worse, IBM has told other PC makers that its basic computer patents may entitle it to collect retroactive royalties on machines they have already sold.

Such disputes look elementary compared to what's happening in the biotechnology industry. Nearly every gene-spliced drug is a copy of an animal protein that exists in nature. And that raises the perplexing question of who gets the patent—the company that isolated and purified the natural protein or the one that cloned it? So far, "there are more lawsuits than products," says James F. Haley Jr., a biotech lawyer.

NO MILQUETOAST. That's certainly true at Genentech Inc. The South San Francisco (Calif.) company sells only two products but is involved in seven suits, and its stock gyrates depending on the market's view of how strong those suits are. Rival Genetics Institute is no Milquetoast, either. Sued by Genentech over the clot-busting drug called tissue plasminogen activator, GI has counter-sued to cover

The 1988 trade law tries to bully foreign thieves of intellectual property by first embarrassing them

the cost of what it alleges is a spurious suit.

On another front, GI is fighting Amgen Corp. over erythropoietin, a new anemia drug that stimulates the production of red blood cells. GI is claiming its natural version takes precedence over Amgen's gene-spliced product. Still, there's a limit: GI's litigation costs this year could reach \$2 million. To hold down expenses, it recently signed a cross-licensing agreement with three other companies for Factor VIII, a new blood-clotting drug. "Biotechnology is not a game for the fainthearted," says Eisen, GI's lawyer.

Still, most executives think the legal fisticuffs are worth it. In October, Exxon Corp. agreed to pay Lubrizol Corp. \$86 million to settle the Wickliffe (Ohio) company's claim that a new line of Exxon motor-oil additives infringed eight Lubrizol patents. Exxon settled just before trial, after a preliminary court ruling barred it from selling products using the key patent in question. Exxon also agreed not to market in the U.S. 300 products that Lubrizol claimed violated the patent. "The protection of intellectual property is critical," says Lubrizol Chairman Lester E. Coleman. "It is

REVENGE OF THE NERDS: PATENT LAWYERS GRAB THE SPOTLIGHT

David J. Lee finally has arrived. An attorney with New York's Fish & Neave, one of the nation's premier patent-law firms, Lee and his ilk used to be considered the nerds of the legal profession—the engineers in a field stuffed with liberal arts majors. Their specialty was dull compared with the excitement of the courtroom or courtroom. But today, with intellectual property enjoying a renaissance, the lawyer who understands computers or biotechnology is a scarce commodity. Says Lee: "It's the hot legal specialty to be in."

Patent law's reputation as a bore may explain why there are still only about 10,000 patent lawyers, the same as a decade ago. But that's a blessing in a way. Patent lawyers and their boutiques are being gobbled up at high prices by general firms looking to cash in on the patent boom. Smaller firms have to be more creative. New York City's Pennie & Edmonds offers newly minted PhDs in the sciences an expense-paid law degree if they work at the firm during law school—and perhaps full-time after graduation. Milwaukee's Foley & Lardner is sending its own lawyers back for electrical engineering graduate degrees. Indeed, patent lawyers now command the same rates as top corporate attorneys or litigators—up to \$350 an hour in New York.

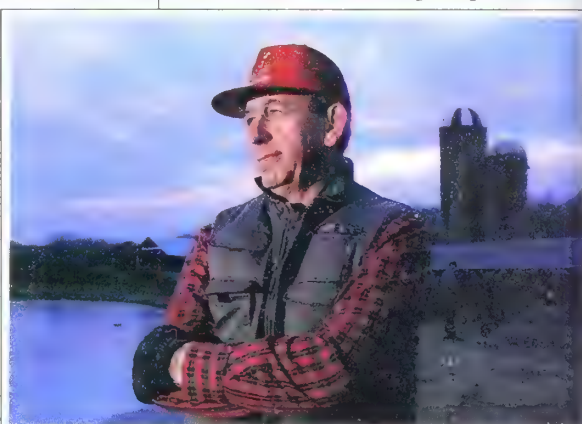
GRINDING AWAY. They earn it. Each day hundreds of them spend hours in the dingy quarters of the U.S. Patent & Trademark Office outside Washington, hunched over technical documents, filing applications, or waiting to meet with patent examiners. It is tedious work. But it also yields a certain satisfaction and power for people with a unique combination of skills.

Hal D. Cooper, 55, is one of 30 intellectual property lawyers at Cleveland-based Jones, Day, Reavis & Pogue. His boyhood dream to fly jet fighters died when he failed an eye exam. So he was

drafted into the Army, where he used his engineering degree to test engines. Now, when Cooper isn't tending to his two farms, he uses his engineer's training in patent law.

Texas Instruments Inc. and Lubrizol Corp. are glad for that. Cooper headed the legal team representing TI in its battle to force Asian semiconductor manufacturers to increase the royalties that they pay for TI chip technology. And Cooper helped Lubrizol win \$86 million from Exxon Corp. in a David-and-Goliath infringement case over motor fuel additives.

Such victories have prompted execu-



COOPER: A DAVID-AND-GOLIATH WIN IN LUBRIZOL VS. EXXON

tives to confer a higher status on their patents and the lawyers who tend them. That's how it used to be at the turn of the century, when Frederick Fish and Charles Neave, the founders of Fish & Neave, were president of American Telephone & Telegraph Co. and general counsel of General Electric Co., respectively. Fish defended Alexander Graham Bell's first two patents, and the firm defended Bell in hundreds of patent infringement suits. Today, Fish & Neave partners do the routine chores, such as prosecuting patent applications. But mostly they are litigators in major suits.

The vast majority of patent lawyers will continue to have less glamorous jobs than that. Still, protecting the intellectual property of U.S. companies is one of the few ways left for America to flex its muscles internationally. And as more companies realize this, the role of patent lawyers can only grow.

By Paula Dwyer, with Stephen Phillips in Cleveland

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Grand Prize
1989 Camaro RS Convertible

If you want to get on track to higher office productivity, IBM has your Wheels—the Wheelwriter® Series II Typewriters. Test-drive the Wheelwriter 50 or 70 in your own office. It's free. Discover why Buyers Laboratory Inc. rated the Wheelwriter 50 an "ideal tool for word processing and statistical typing," and the Wheelwriter 70 the "Most Outstanding Display-based Electronic Typewriter" of the year "that offers a wide range of excellent word processing capabilities."

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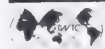
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a corporation organized by

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*The undersigned acted as financial advisors to the
Special Committee of the Board of Directors of
RJR Nabisco, Inc. in connection with this transaction.*

DILLON, READ & CO. INC.

LAZARD FRÈRES & CO.

May 3, 1989

really the only way we can compete."

If that's true at home, it's doubly so overseas. Prior to the passage of last year's trade law, even if a company could prove that a foreign competitor violated a U.S. patent on a manufacturing process, it had to show that economic damage had resulted. Corning Glass Works, which had sued Sumitomo Electric Industries for stealing a method for

making optical fibers, couldn't meet the test because the International Trade Commission found that Corning was selling all the optical fiber it could turn out.

Under the new law, it's enough to prove that a patent has been violated. That should encourage research in the U.S. on more efficient manufacturing methods, economists say, since those

innovations will not be stolen now.

Another key section of the trade law tries to bully intellectual property thieves abroad by embarrassing them. By May 30, U.S. Trade Representative Carla A. Hills must release a list of countries that inadequately protect American goods from counterfeiting or infringement. Six months later, countries that haven't tightened their protec-

Commentary/by Keith Hammonds

DON'T BURY SOFTWARE'S PROMISE IN A LEGAL BOG

Suppose you invented a better clock. No one would question your legal right to protect the mechanism that runs it from imitation. But what about the face: the arrangement of 12 numerals and the clockwise movement of the hands? Should you be able to protect that? Surely not—that's too far-fetched.

Or is it?

That's what the courts will decide starting late this year. The products at issue are computer programs, not clocks, but the question is the same: To what extent can a software company legally protect a program's appearance, design, and functionality—its "look and feel"? The question is so crucial that any answer is controversial. But a cursory look at the history of the computer business provides a conclusion: The marketplace, not the courts, should decide whose "look and feel" is deserving.

MUDDY ARENA. The issue has been brought to a head by three companies. In Boston, Lotus Development Corp. has charged two small rivals with copying the look of its 1-2-3 spreadsheet. In California, Ashton-Tate Inc. is suing to stop a competitor from using its computer language in a new database package. And Apple Computer Inc. hopes to reserve for itself pictorial symbols used to operate its personal computers.

The cases will set precedents in what has become a muddy legal arena. Traditional copyright law, which protects creative expression of ideas but not the ideas themselves, doesn't perfectly apply to software, whose characteristics are both creative and functional. Increasingly, in fact, software publishers are applying for patents. But they can't patent everything. So they're

also trying to expand copyright law.

The trick is to move the law in a direction that benefits everyone. But it's doubtful whether exceedingly broad protections will do that. From the start, software has been a derivative product. Programmers improve on what has been done before. "That's the way we learned to do things," says Daniel S. Bricklin, a veteran program-

makes up 1-2-3 or Ashton-Tate's dBase IV. And courts are concluding that exact duplication of a program's appearance on the screen is a crime. But should the law protect features that just make a program easier to use?

Not if the goal is to promote better software and the international competitiveness of the companies that buy it. The software business is hurtling

forward at an astounding rate: Programs are getting bigger, more powerful, and more complex by orders of magnitude every few years. To keep up, innovators need the building blocks that, after a decade, most PC buyers take for granted: pop-up menus, for example. Or use of the F1 key to call up helpful instructions.

SHELTERED LIFE? If Lotus and Apple win their suits, even these simple devices will be protected from duplication. That would create a "consumer-hostile issue in an industry that can ill afford it," observes C. David Seuss, CEO and president of Spinnaker Software Corp.

It could also ensure that a few big companies control the direction of the industry. This is hap-

pening anyway, to a degree: Large companies are the ones with the research resources to tackle bigger programs and the marketing clout to sell them. Do they need another big advantage?

Mark Eppley, president of Traveling Software, doesn't think so. His motto is "innovate, don't litigate." While that's a self-serving position for any entrepreneur to take, it's also a principle that companies such as Apple and Lotus followed as startups. That alone should persuade the courts to prevent these companies from closing the door on others now.

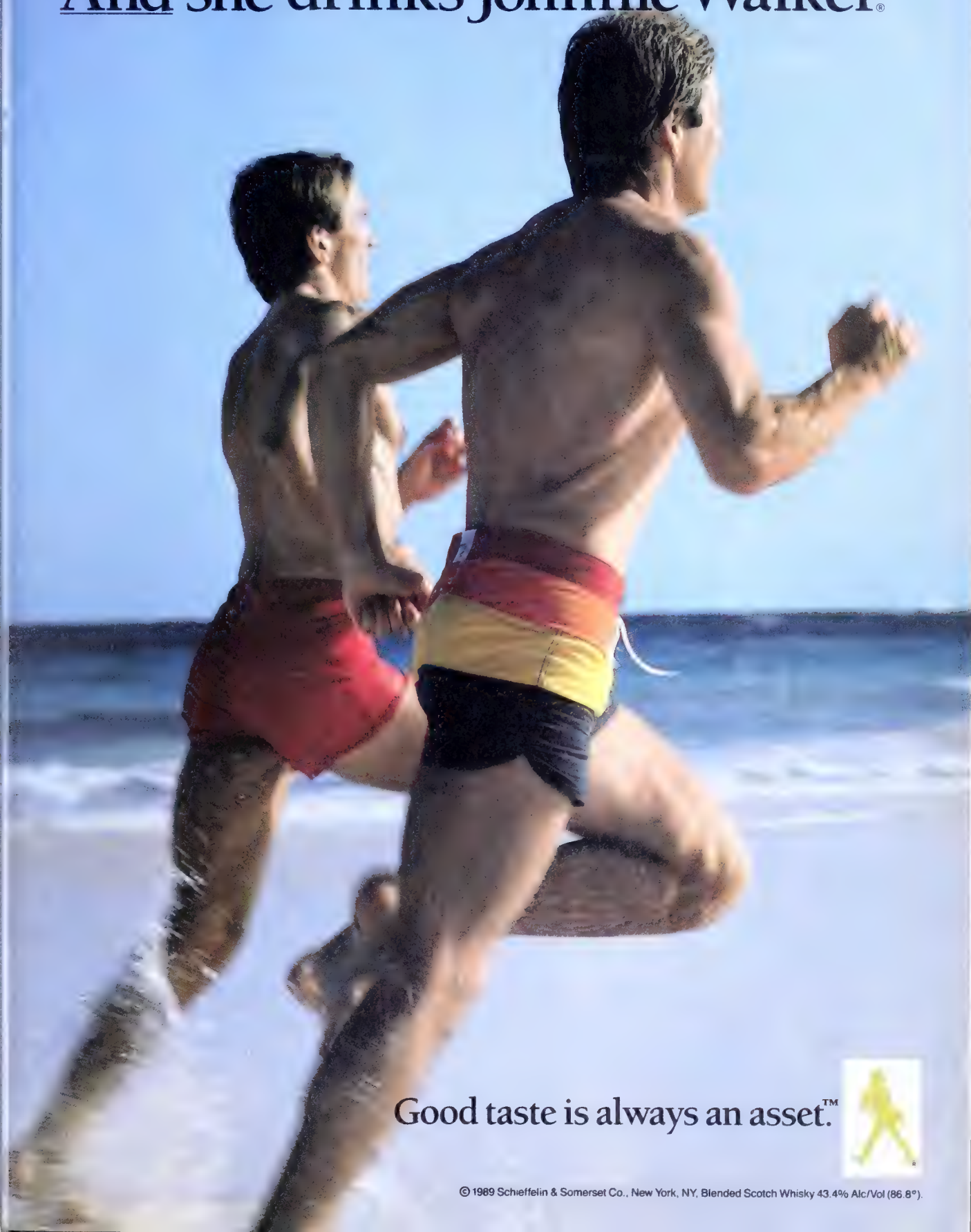


mer. "We stand on the shoulders of other giants."

In 1979, Bricklin himself invented VisiCalc, the first spreadsheet for personal computers. Three years later, Lotus founder Mitchell D. Kapur borrowed the concept and turned it into 1-2-3, soon making VisiCalc obsolete. That, says Bricklin, is the one best argument against broad copyright protection for software: It would leave little room for the next Lotus to emerge.

Certainly, Lotus and other innovators are entitled to protection of their creative efforts. Copyright law clearly makes it illegal to copy the code that

**“Her eyes are Maliblu^e.
And she drinks Johnnie Walker”**



Good taste is always an asset.[™]



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Legal Affairs

tions will face costly trade sanctions, such as removal from the list of preferred trading partners. U.S. officials are meeting daily with representatives of Third World countries, which are seen as the worst culprits. And already, under a now-infamous section of the 1988 law called Super 301, Hills has issued a report outlining the unfair trade practices of 36 countries. Nearly every listing includes a section on lax intellectual property protection.

BACKROOM PRICE. It will take more than chest-pounding, however, to stop the illegal copying that has become ingrained in many less developed countries. For one thing, some governments cloak these activities in public-welfare terms, arguing that enforcing U.S. intellectual property laws will destroy local economies and raise prices, especially for drugs and medical care. Unchallenged, the pirates have free rein. At the Fat Kee Computer Book Shop in Hong Kong's Golden Computer Centre, a two-story building occupying a city block, computer lovers will find plastic-covered, copyrighted editions of the Lotus 1-2-3 spreadsheet on display at \$507.69. A request for "other prices" produces a rip-off copy for \$44.87. "There is no point in

buying the original," says manager Kony Suen.

Another difficulty is that U.S. retaliation against pirating countries risks helping anti-American or antigovernment interests. "Developing countries have allowed industries based on stealing to grow up, and now those industries have political power," says Pfizer's

'It's regrettable that
the court leans as far as
it does. We didn't
intend it to be that way'

Pratt, who recently chaired a Presidential advisory committee on intellectual property rights and trade rules.

Consider Thailand. President Reagan in late 1988 denied Bangkok duty-free treatment on \$165 million worth of goods from Thailand because of lax enforcement of intellectual property laws. This produced a vitriolic reaction. "What the Americans want is to forcibly flood the Thai market with U.S. products,"

declares one Thai university professor.

After the U.S. imposed punitive tariffs on \$39 million of Brazilian imports last June to retaliate against Brazil's refusal to protect American pharmaceutical patents, Ulysses Guimarães, president of Brazil's Congress, blasted the decision as a "gratuitous act of aggression." Then, Brazil teamed up with other Third World countries to prevent General Agreement on Tariffs & Trade negotiators from adopting intellectual property standards. GATT is an international body that attempts to eliminate trade barriers.

In South Korea, senior officials worry that protecting U.S. intellectual property rights could mean removing unauthorized versions of foreign textbooks from the dozen bookstores outside the entrance of Seoul National University. And they believe that could rekindle the recent wave of anti-American student demonstrations in Seoul.

Indeed, U.S. companies are divided over the wisdom of cracking down overseas. That may curtail unfair competition, but at what price? Richard R. Nelson, a Columbia University economist, warns that foreign companies, forced to move beyond mere imitation, could be-

OH BOY!"

"DAD'S NOSE..."

"MOM'S EYES..."

"8 POUNDS, 3 OUNCES..."

write: Centel Corporation, Dept. A, 8725 Higgins Road, Chicago, IL 60631.

an even greater threat to the U. S. say "will be a little more original and a little more creative"—and beat American products on a level playing field.

KEY INVESTORS. In the U.S., Kastentier, Congress' leading intellectual property booster, sees signs that intellectual property protection is going too far. He criticizes the tendencies of the appeals court. "It's regrettable that the court leans as far as it does. We don't intend it to be that way." Another high & Neave partner, Robert C. Morgan, believes that small companies are bearing the brunt of infringement suits. Morgan cites Intel Corp.'s lawsuit charging its client, Atmel Corp., a small Silicon Valley chipmaker, with infringing Intel's memory chip technology. Atmel couldn't sue publicly last year because Intel's suit blocked potential investors. While the case awaits action in court, Atmel hangs in and is seeking other sources of capital. Says Morgan: "It appears patents are being used by large companies to beat down smaller competitors." Reminds Intel lawyer Carl Silverman: "This is no make-believe litigation. Atmel is copying products without a license."

If tactics like Intel's win out, critics of innovation could suffer. For years, few breakthroughs have occurred be-

SOME BIG FIGHTS OVER INTELLECTUAL PROPERTY

1985 Polaroid wins a nine-year battle against Eastman Kodak over patents for instant cameras, forcing Kodak out of the business. Pending damage trial could force Kodak to pay up to \$10 billion

1986 An appeals court victory leads Patlex Corp., a patent licensing company, to sue infringers of patents held by inventor Gordon Gould for laser technology. Most will pay up rather than litigate. Other inventors adopt Patlex's strategy

1987 Corning Glass Works wins patent infringement suit against Sumitomo Electric Industries over the design of optical fibers, forcing Sumitomo to close its fiber optic plant

1988 A landmark arbitration settlement calls for Fujitsu to pay close to \$1 billion to IBM to resolve a dispute over copyrights on mainframe operating system software. In return, Fujitsu gains access to updated versions of IBM's software

1989 Resolving a five-year-old lawsuit between NEC and Intel, a federal judge in San Jose, Calif., rules that the microcode used to instruct the microprocessors that run personal computers can be copyrighted but that Intel forfeited its claim to ownership because it failed to use the copyright symbol. The judge also rules that competitors can legally duplicate the functions of a chip without infringing

DATA: BW

cause companies could build on the successes of their competitors. Yale University economist Richard C. Levin wonders if the computer industry would even have developed if companies hadn't had easy access to the transistor, the pioneering technology patented by American Telephone & Telegraph Co. in 1948 and licensed freely to all comers.

For now, such questions remain in the background. Patent, copyright, and

trademark owners have the upper hand. They're likely to hold it for a while. And they're confident that their newfound power, combined with Yankee ingenuity, will preserve America's edge in innovation. The nation's future could depend on whether they're right.

By Paula Dwyer in Washington, with Laura Jereski in Boston, Zachary Schiller in Cleveland, Dinah Lee in Hong Kong, and bureau reports.



"BOY!"

"I'M AN AUNT!"

CENTEL

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WHERE PEOPLE CONNECT

- Telephone • Cellular Communications •
- Business Systems • Power Distribution •

HOT GROWTH COMPANIES

BW'S ANNUAL LIST OF THE BEST SMALL BUSINESSES

Norman Melnick isn't what you'd call a high-powered operator. No business school, no fancy suits, no car phone. He's just a regular guy from Brooklyn who happens to know a lot about pens. And Moms.

Melnick, a gregarious former chemist, is chairman and founder of Pentech International Inc., No. 11 on BUSINESS WEEK's annual list of Hot Growth Companies. With son David, chief of operations, Melnick masterminds products designed to excite both children and their mothers. Take Erasables, his line of erasable marking pens. "A kid can color on the carpet, and it comes right off," Melnick explains. Or try Gripstix pencils, which have special grooves to fit a child's fingers and help with penmanship. Then there are Twins, crayons with a different-colored point on each end, so kids get twice as many colors per pack.

THINKING SMALL. Melnick isn't the first to try to satisfy a child's urge to draw. But he's got a couple of things in his favor. He brainstorms endlessly to come up with products that offer a unique twist but might not generate the volume demanded by a larger company. And he's able to devote the necessary attention to seemingly simple but complicated processes, such as producing a two-color crayon. Bigger companies, he says, couldn't be bothered figuring out how to make Twins, but Melnick and his Korean manufacturer have come up with an efficient way to automate the process. The hustle has paid off: Since its founding in 1984, Pentech's sales have rocketed to \$17.8 million in the latest 12 months, while earnings have grown to \$2 million.

Melnick is a case study in how thinking small can pay big dividends. Larger companies, beset with threats from abroad and merger mania, are tending to larger markets. Because manufacturing technology and automation have gotten cheaper, entrepreneurs like Melnick can exploit the niches left behind more efficiently. But it's no cakewalk being small. A dearth of skilled employees and concerns over a slowdown in the economy are plaguing small U.S. companies.

And as this year's BW survey of the international upstarts attests (page 110), global competition and weak financial markets are making life more challenging for smaller companies worldwide.

The BUSINESS WEEK Hot Growth list of publicly traded companies is full of businesses that have found an edge over the competition—big or small. From a universe of 3,853 companies with sales of less than \$150 million tracked by Standard & Poor's Compustat Services Inc., BW chose the top 100 based on average growth in sales and earnings in the past three years and a three-year average return on invested capital. With 16 entries, software companies are the most heavily represented—as the industry rushes to help the nation program its glut of computer hardware. Companies providing medical products and services, such as No. 1 T² Medical Inc., also are hot, benefiting from the cost-cutting craze in medicine.

By and large, this is an eclectic group. What they have in common is scorching performance: Average three-year sales growth topped 70% vs. 7.3% for companies in the Standard & Poor's 400-stock index. Earnings growth averaged 120% vs. S&P's 19.1%. And while these companies averaged a 23.7% return over three years, the S&P averaged just 10.5%.

Getting on the BW list is tough, but staying on it is even tougher: Only 35 of this year's crop graced the list in 1988. Some just couldn't keep up the pace, slowed to a crawl by growing pains. Looking to diversify from vinyl-siding installation into building decks, Amre Inc. tumbled when an acquisition went awry. Ohio Art Co. lost money in the first quarter because a lackluster Christmas crimped sales of its toys. However, a few companies, such as L. A. Gear Inc., simply outgrew the list. Ranked No. 3 last year, the trendy footwear and apparel maker exploded past BW's boundaries when sales shot from \$70.6 million in 1987 to \$223 million in 1988.

After seven years of robust economic expansion, even the highfliers can anticipate some turbulence—particularly

THE SCORCHERS: RANKING THE TOP COMPANIES

SALES

	Millions of dollars
GOLDEN VALLEY MICROWAVE	\$1
NETWORK EQUIPMENT TECH	1
CSS INDUSTRIES	1
CAREERCOM CORP	1
BIOMET	1

*Latest four quarters

EARNINGS

	Millions of dollars
ST. JUDE MEDICAL	\$
AUTODESK	
BOLAR PHARMACEUTICAL	
ADOBE SYSTEMS	
TCBY ENTERPRISES	

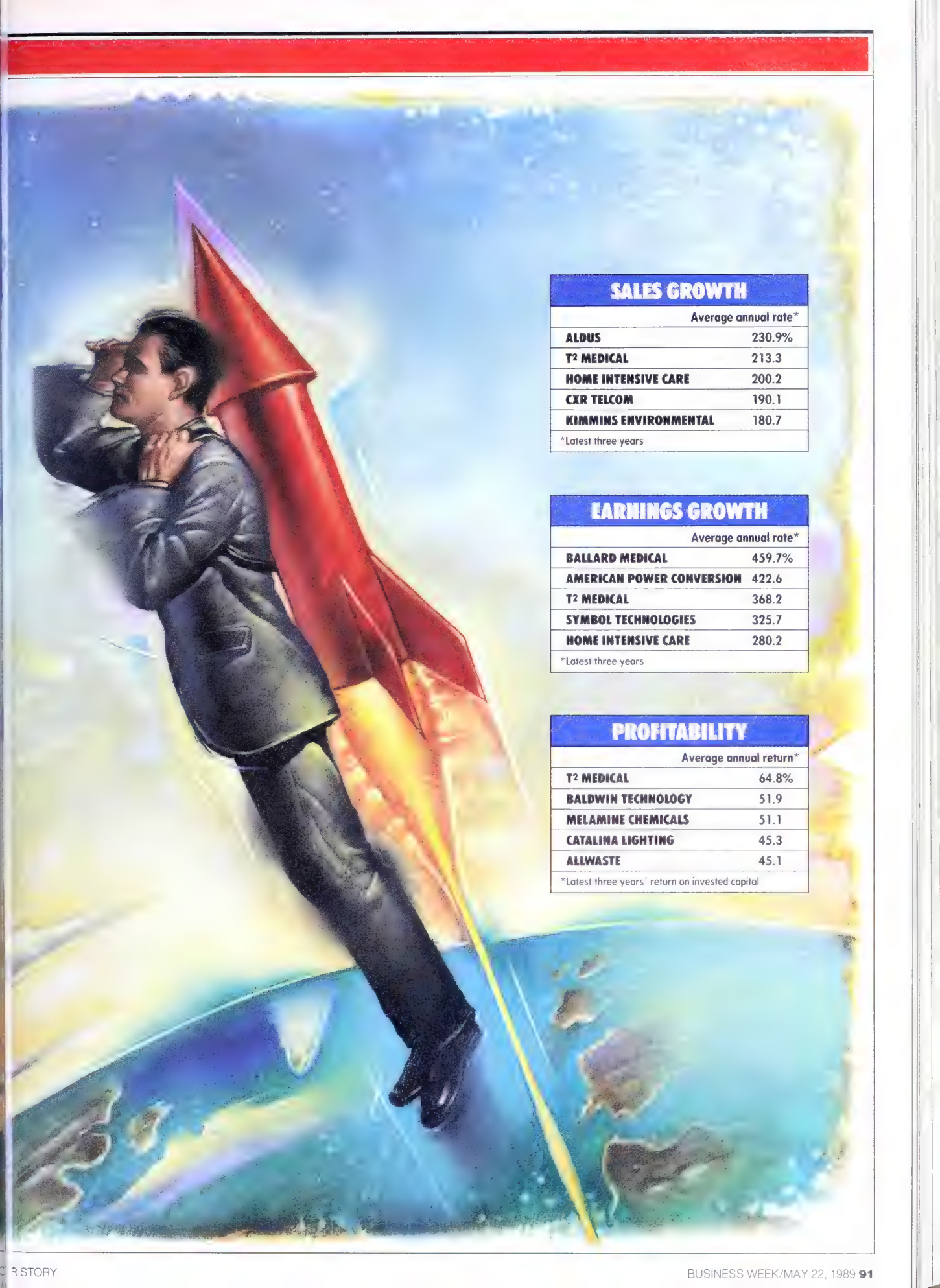
*Latest four quarters

MARKET VALUE

	Millions of dollars
ST. JUDE MEDICAL	\$
AUTODESK	
TCBY ENTERPRISES	
BIOMET	
BOLAR PHARMACEUTICAL	

*As of Apr. 28

DATA: COMPUSTAT SERVICES INC.



SALES GROWTH

Average annual rate*	
ALDUS	230.9%
T² MEDICAL	213.3
HOME INTENSIVE CARE	200.2
CXR TELCOM	190.1
KIMMINS ENVIRONMENTAL	180.7

*Latest three years

EARNINGS GROWTH

Average annual rate*	
BALLARD MEDICAL	459.7%
AMERICAN POWER CONVERSION	422.6
T² MEDICAL	368.2
SYMBOL TECHNOLOGIES	325.7
HOME INTENSIVE CARE	280.2

*Latest three years

PROFITABILITY

Average annual return*	
T² MEDICAL	64.8%
BALDWIN TECHNOLOGY	51.9
MELAMINE CHEMICALS	51.1
CATALINA LIGHTING	45.3
ALLWASTE	45.1

*Latest three years' return on invested capital

when it comes to financing. To see the impact of the anemic market for new stock offerings, just ask Vincent M. Galano Sr., chairman of Convergent Solutions Inc. in Laurence Harbor, N.J. Convergent Solutions, whose booming sales of software tools helped make it No. 17 on the list, went public two months before Bloody Monday with high hopes. Then, Fitzgerald, De Arman & Roberts Inc., the brokerage company that orchestrated its offering, folded in the aftermath. With no one to push sales of its stock, the shares have languished at about 3, only four times current earnings. Galano, who had hoped to use newly issued stock to make acquisitions and lure top-notch talent, can't use it for either. To make matters worse, this year Convergent had to buy back some of its shares held by investment company T. H. Lehman & Co. when the disgruntled stockholder took a run at the company. Asks Galano now: "What have I done by going public?"

BANKING ON BANKS. Pentech's Melnick also lost his sponsoring broker to the stock market crash. And although both are growing smartly, neither Phoenix Technologies Ltd., a software maker, nor Arctic Alaska Fisheries Inc., a fishing company, is trading above the prices commanded at the time it went public last year.

One alternative to such woes, say a growing number of small-business financiers, might be to avoid the equity markets altogether. The reason: In the past five years, entrepreneurs have increasingly been able to turn to banks, which have become more willing to lend to small, high-risk companies. Moreover, banks will refinance the debt later, allowing equity investors a way out. That kind of liquidity used to be available only through a public offering. "It's a whole new ball game," says Arthur D. Perrone Jr., vice-chairman at consultant Geneva Cos. In the meantime, the outfit can grow at its own pace, free from Wall Street's glare. The new acceptance of such deals, says Stanley E. Pratt, a general partner in Abbott Capital Management, "keeps venture capitalists from forcing companies [to go] public too soon."

For those companies already trading on the open market, however, the outlook is bittersweet. Small companies should be able to cope fairly well with an economic slowdown because of their agility in adjusting overhead and output. But the heady days of unlimited growth may soon be over. Although there will always be Hot Growth Companies, in an uncertain environment, leading the pack will become tougher than ever.

By Michael Oneal in New York

T² MEDICAL

MIXING UP A RICH INTRAVENOUS SOLUTION

Five years ago, Thomas E. Haire and Tommy H. Carter were two down-on-their-luck, out-of-work, medical-products salesmen. Then they spotted an intriguing trend: A bunch of companies had popped up to deliver intravenous drugs and nutrients to patients at home.

So, Haire and Carter incorporated as T² Medical Inc. and hit the road in a 1972

'They were the first to recognize that doctors wanted a piece of the action'

Grand Prix to build a company. Their story says a lot about how quickly the environment for a small business can change—and how vital it is for an entrepreneur to change along with it.

The two T's came up with a novel marketing strategy. They set up local service centers by enlisting hometown doctors as investors. The doctors anted up the capital, and, as owners, assigned

a steady supply of patients to T²'s care. "We kicked ass when we came to town," grins Haire, T²'s 44-year-old chairman.

Indeed, Haire and Carter have built what's probably the nation's most profitable home-infusion company. Founded in an Atlanta suburb in early 1984, T² now operates 37 infusion centers nationwide. The entrepreneurs today boast a net worth of some \$7 million apiece. They head a fast-growing business projected to triple sales, to about \$35 million, and double earnings, to about \$7 million, in the fiscal year ending on Sept. 30.

T²'s crafty joint ventures caught rivals off guard. In response, some, such as industry leader Caremark, a unit of Baxter Healthcare Corp., are also offering partnership deals and fees to doctors who refer patients. "T² is a tough little competitor," concedes Caremark President Charles H. Blanchard. "They were the first to recognize that doctors wanted a piece of the action."

'ON THIN ICE.' T² was also the first to catch congressional heat. A new law, effective next year, bars medicare payments to infusion centers owned by referring physicians. T² was quick to exploit a loophole that permits payments as long as no single doctor owns more than 5% of a center he refers patients to. Consequently, T² sold stock to the public last year and is using the stock and cash to buy centers back from the doctors. The doctors' interest in T²'s success remains strong, however, since they own 50% of the company.

Nevertheless, another proposal rattling around the Capitol would eradicate



HAIRE AND CARTER: TROUBLE IN WASHINGTON, PRESSURE FROM THE COMPETITION

exceptions for all but the largest public companies. And even without a subpoena from Washington, T² faces plenty of threats. As home-infusion companies proliferate, doctors and patients are becoming more choosy, and T²'s putting pressure on prices. Moreover, buying out its doctor-partners has cost the company's debt and slowed its expansion. Now, the company, which lacks a sales force, must learn to act as aggressively as Caremark and

others that have sellers in the field. "[T²] is skating on thin ice," says competitor Patrick S. Smith, president of New England Critical Care Inc.

Haire admits that T² is a "one-trick pony." And for now, it appears that one trick is still appealing. Since home infusion is cheaper than hospital stays, analysts expect 20% annual growth over the next five years. Haire and Carter insist that the relationships they've developed with local doctors will keep growth brisk

even if they have to rely only on their existing markets.

Like many an entrepreneur before them, however, T²'s scrappy founders will have to fine-tune their approach to cope with a quickly changing environment. From here on, growth will depend on the basics: efficiencies, service and pounding the pavement for customers. The days of taking a shortcut to growth with a marketing gimmick are over.

By Scott Ticer in Roswell, Ga.

SOFTWARE TOOLWORKS

LES CRANE MAKES THE FLOPPY-DISK IT PARADE

You can count on one hand the software executives who won an Emmy and a Grammy before being aboard BUSINESS WEEK's list of Growth Companies. Make that one finger.

Meet Les Crane, founder of Software Toolworks Inc. In his pre-software days, he won a TV Emmy Award in 1963 for his outrageous, Morton Downey-like antics as a talk-show host. Poor ratings sank the show. But Crane turned to recording and eight years later, he picked up a Grammy for his hit single "Considerata," a moody tune that featured him reciting: "Go placidly amid the sea and haste...."

'STROKE OF GENIUS.' Medical school in Mexico, movie acting, and a stint as a lia consultant were less successful. Since he launched Software Toolworks in 1985, Crane has returned to the Parade with floppy disks. Chessmaster 2000 and Chessmaster 2100, a pair of programs he invented for personal computers, have become the industry's best-selling chess games. And now he has a lot of offerings. "Records are no different than this," Crane says, waving a floppy disk in the air. "They're both forms of communication."

Of course, Toolworks isn't the only outfit targeting the home computer market. But Crane wins accolades for the offbeat. Jazzy 3-D graphics spice standard games such as chess. And for sheer originality, try Life and Death, where hackers become surgeons who offload their electronic patients. For the educational market, Toolworks features Mavis Beacon Teaches Typing, which tutors users with rhymes, riddles, and puzzles. "It's a stroke of genius," admits David Seuss, chief executive of Spinner Software Corp., a Toolworks rival. He told, Toolworks has sold 1 million copies of its programs in the game and educational markets.



CRANE: RECORDS AND FLOPPIES ARE "BOTH FORMS OF COMMUNICATION"

Crane took the Chatsworth (Calif.) company public two years ago and has since seen its fortunes soar. Toolworks' sales have grown sixfold, to \$3.8 million for the fiscal year ended on Mar. 31, while profits have shot from breakeven to \$594,000. Analysts project that gross margins of 68%—a full 23 percentage points ahead of the industry average—will help push profits to \$2 million this year on revenues of \$11 million. The stock is at an all-time high of \$8 a share, 10% above last year's peak.

Credit Crane's creativity for much of that success. But marketing savvy and hustle have helped, too. He has lined up distributor Electronic Arts to push his products into 11,000 stores nationwide. PC maker HeadStart Technologies Co. will bundle various Toolworks programs, including Chessmaster and Mavis Beacon, with the 35,000 computers it will ship this year. In addition, Crane has enlisted the London arm of Chicago's Mindscape Inc. to tap the European market and has licensed Chessmaster for a version to be used on the popular Nintendo game systems. "He's a marketing whiz who knows how to pick bread-and-butter products," says Sarah A. Stack, an analyst at Bateman Eichler, Hill Rich-

ards Inc. in Los Angeles.

Crane faces some hurdles. The market for computer games is faddish and unpredictable. Analysts warn that Toolworks must keep balancing its more outrageous offerings with standards such as Chessmaster. Crane, who helps control his costs by producing his own floppies, hedges his bet on games by printing packages and instruction materials for other software makers in his production facilities. Moreover, with the purchase of D/S Technologies Inc., a small software maker near Chicago, he's diversifying into "utilities" software, used by programmers for troubleshooting.

Throughout the years, Crane's formula for success has remained constant. On the *Les Crane Show*, the host confronted guests, such as Lee Harvey Oswald's widow, Marina, with a microphone shaped like a gun. His plays now are no less provocative. He plans to release three new products in June, including Journey through the Black Hole, the first software game a user must don 3-D glasses to play. Crane admits he still thinks about the bright lights of show biz. But for now, he'll take his applause in the form of bulk sales.

By Patrick E. Cole in Chatsworth, Calif.

The challenge was to create a new car worthy of wearing the Thunderbird wings. The result is the most aerodynamic Thunderbird ever. And a car with performance to match its looks.

A responsive 3.8 litre V-6 engine with sequential electronic fuel-injection is standard. So is an independent rear suspension. And

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Inside, Thunderbird achieves a new level of comfort and convenience with increased room for five adults and a long list of standard features, including air conditioning, power windows and an electronic AM/FM stereo.

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ALLWASTE

BUBBA NELSON FIGHTS FOR THE DIRTY JOBS

In 1978, R. L. "Bubba" Nelson Jr. was driving a garbage truck for his one-man startup, Allwaste Inc. He believed that removing waste from petrochemical smokestacks and tanks with a powerful vacuum cleaner would pay off one day. He was right. In 1980, he had 12 employees. Now, Nelson sends checks to 1,900 people. "We're riding the crest," he crows.

Nelson's company has since moved into other brisk growth markets: asbestos removal and glass recycling. And profits have continued to soar, rising 103% in 1988, to \$6.5 million on revenues of \$86 million.

FIGHTERS. Nelson buys his growth. He was on the acquisitions team at trash giant Browning-Ferris Industries Inc. before starting Allwaste. He has since bagged 29 mom-and-pop outfits with the help of President Clayton K. Trier.

Allwaste's fat margins come largely



CO-CEOs TRIER AND NELSON: THEY'RE CLEANING UP WITH ASBESTOS REMOVAL

from asbestos removal, for which it charges up to 30% more than competitors. Jim D. Jackson, a manager at Century Development Co., called in Allwaste and six other contractors when a fire sent asbestos fibers flying. "They were by far the best," Jackson says. Were they worth the extra money? "No," he says. "We used them because we were

in a crisis." New competition may force Allwaste to slash prices.

But for now, Nelson's on a roll: Allwaste's profit is projected to grow 40% in 1989. And instead of sitting behind the wheel of a truck, he's crisscrossing the U. S. in a plane on the lookout for another company to capture.

By Todd Vogel in Houston

QUIKSILVER

HEY, DUDE, CHECK OUT THESE BOARDSHORTS

Much of the work force shows up in shorts and tank tops. Computer-aided design systems lay out the patterns. The resulting products snake through a huge automated warehouse. Sounds like another California chipmaker, right? Guess again.

Quiksilver Inc. makes clothes for the surfer set. "Young, healthy, adventurous, athletic. Parties, beaches, sex, colors. That about sums it up," says President Bob McKnight. Or, as it says on his door: "Robert B. McKnight Jr., Director of Groovology."

HOTDOGS. Quiksilver began in 1976, when McKnight and world champion surfer Jeff Hakman hawked 300 pairs of "boardsHORTS" out of the back of a van. Today, it's a \$50 million enterprise. For the year ended last Oct. 31, profits rose 59%, to \$3.8 million, while sales climbed 61%, to \$48.3 million. The stock recently hit an all-time high of \$14 a share.

The company has expanded its product line into more conventional sports-

wear such as knit shirts and walking shorts. And it has slowly moved distribution from surf shops to specialty and department stores. The target customer remains the teenage male. But the waistbands have expanded to a generous 38 inches in order to accommodate less-than-ideal bodies.

Management change has been more radical. Before Quiksilver went public in 1986, McKnight and three others ran the company, pulling down annual salaries in the \$735,000 range. Those were cut to \$150,000, and the company has hired John C. Warner, a former May Department Stores Co. executive, as chairman. At 41, Warner is Quiksilver's oldest employee. And he's no surfer. He brought in professionals in sales, production, and accounting, and instigated the new warehouse and computer systems.

While Warner minds the store, everyone else minds the image. To launch its first line of skiwear last year, the company ran a single ad and hired three skiers to hit the slopes in full Quiksilver regalia. "We gave 'em \$10,000 and told 'em to hit the top resorts, ski crazy and have fun with the girls," says McKnight. Forgive him. He's director of groovology, after all.

By Larry Armstrong in Costa Mesa, Calif.



DIRECTOR OF GROOVOLITY MCKNIGHT: MAKING CLOTHES FOR THE SURFER SET

Why Is The American Express Card Green?

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your Visa card you can get cash at over 32,000 cash machines around the world. Combined, this is more than ten times as many places as American Express.

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Sterling Optical needed
a computer company
with exceptional vision.

*Left to Right
Daron Kabu
Executive Vice President, Sterling Optical*

*Richard Lefebvre
AT&T Data Sales Executive*

*Robert S. Satin
Chairman and CEO, IPCO Corporation,
President, Sterling Optical Division*

Chesterfield, Missouri February 28, 1989

Sterling Optical, one of the leading optical chains in the country, was looking for a way to get a jump on their competitors in the retail eyeglass and eyecare marketplace. Sterling Optical's Bob Savin, Daron Kahn and AT&T's Rich Letourneau discuss how AT&T developed an open systems-based, retail point-of-sale system to network their 250 stores nationwide.

Sterling: We were getting frustrated by the delays we were facing with the old way of doing things. Our customers were unhappy, we were unhappy, and headquarters wasn't able to keep up with the volume of requests. We knew a highly integrated distributed networked computing solution was the only way to go.

AT&T: And you wanted to preserve the investments you'd already made in applications software—especially those on the System/38.

Sterling: Absolutely. All our RPG-coded customer records and our inventory control system are stored in the database at headquarters. The retail business is demanding—you can't afford to wait to implement brand-new technology. Plus, we don't have a very large computer programming department, and in order to develop, modify, or change corporate programs on the System/38, it's a big effort, and it takes a lot of time.

AT&T: That's why we built our multiuser platform based on the UNIX® System V operating system. We gave you the tools to develop new applications and get them into the mainstream of your business quickly.

Sterling: It made sense. We were able to keep our hardware and software *and* install AT&T 6386 WorkGroup Systems in our stores. Now, on a daily basis, we know what's selling and what's not. We even included an employee time and attendance system that feeds into our existing payroll system.

AT&T: And you've kept your system options open. You can modify any part of the

system at any time. Like when you added the automatic pricing software.

Sterling: Right. I think what we like most about the system is its simplicity. Despite the complexity of the information handled, it really gives us easy access to our information. We need that to improve the profit potential of our business, and to maintain our lead in the industry.

AT&T: The system also provides investment protection for what you have today, and a gradual growth path to what you'll need tomorrow.

Sterling: One of the most striking things was AT&T's commitment to service. We came from an environment where it wasn't uncommon to be down for two to three or four days, waiting for equipment to be shipped or repaired.

AT&T: Our message was simple: AT&T wants your business.

Sterling: You were here working as much as we were. And you really listened to us. Of all the vendors we spoke to, you gave us the best proposal, the best equipment, and the best price. In fact, we're so excited about the new system, we wrote it up in our company newsletter.

AT&T: I heard! Can we get a copy?

Sterling: Sure. The only catch is, you have to read it from across the room with one eye closed.

The Sterling Optical Computer Solution:

THE CHALLENGE:

Create a point-of-sale computer system specific to the optical retail business for the 250-store nationwide Sterling Optical chain.

THE SOLUTION:

AT&T created a UNIX System V-based network of AT&T 6386 WorkGroup Systems and AT&T 605 terminals chain-wide. At headquarters, an AT&T 3B2/500 gathers orders and information from each store daily. The system allows a smooth link between the 3B2/500 computer and the existing IBM System/38. A custom INFORMIX database management system forms the heart of the applications software.

THE RESULT:

Sterling Optical customers are getting better service. All store locations will be using one standard point-of-sale system that provides increased productivity, a friendlier working environment, and greatly enhances Sterling Optical's competitiveness in the industry.

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NATURE'S SUNSHINE PRODUCTS

THE MARY KAY OF THE HERB INDUSTRY

Kristine F. Hughes, mother of seven, was a housewife in 1972 when her husband, Eugene, developed a bleeding ulcer. A neighbor suggested he swallow a dose of cayenne pepper—which is supposed to suppress the acids that cause ulcers. The remedy worked, she says, and gave her a great idea. She and her family started putting cayenne and other herbs in capsules, and Nature's Sunshine Products Inc. was born.

When the health and fitness craze hit, all sorts of folks started downing garlic capsules for high blood pressure and bee pollen for a lift in energy. Nature's Sunshine took off. Last year, it enjoyed a 56% increase in net income, to \$3.3 million, on \$44.5 million in sales, and it is on its way to another record year.



CHAIRMAN HUGHES: WHEN THE HEALTH AND FITNESS CRAZE HIT, HER COMPANY TOOK OFF

Still, there are problems. Nature's Sunshine's 16% sales growth last year just barely kept pace with the industry's. The company's president left, and the board is on the prowl for a top-notch marketing executive to fill the job. In addition, there's plenty of competition nipping at the heels of Nature's Sunshine, so it is diversifying into water purifiers and heart catheters.

Nature's Sunshine has 45,000 door-to-door salespeople. And, in some ways, they look upon their leader as the Mary Kay of the herb industry. Chairman Hughes and her husband, who is senior vice-president, entertain and urge their employees at annual conventions. But there's a big difference between her crew and Mary Kay's. While the cosmetics purveyor rewards big producers with pink Cadillacs, Hughes's distributors turned up their noses when she offered jewelry and fur coats as incentives. They asked for health and retirement benefits instead. They're "down-to-earth, common folk," shrugs Hughes.

By Sandra D. Atchison in Spanish Fork, Utah

ARCTIC ALASKA FISHERIES

FISHING FOR RESPECT ON WALL STREET

Fishing companies aren't what you would call Wall Street standards. In fact, Arctic Alaska Fisheries Corp. is the only such company of any size that's held publicly. And since Wall Street isn't used to analyzing Arctic Alaska's problems, life in the fish bowl can be pretty frustrating at times. Despite a record of heady revenue growth, its share price of 8 is a far cry from its high of 15, hit soon after going public in March, 1988.

Although the Exxon oil spill in Prince William Sound didn't affect the Seattle-based outfit, there are plenty of other nasty surprises that can befall a fishing company, such as uncertain weather and volatile prices. Just last year, a fish glut in Japan sent cod prices and Arctic Alaska's margins reeling—resulting in two quarters of weak profits. The company finished 1988 with record earnings anyway. And now, founders Terry J. Baker, a former fish marketer, and Francis L. Miller, a veteran commer-

cial fisherman, are trying to convince investors they're here to stay. The company's sales have nearly tripled to \$120.6 million over the past three years. Merrill Lynch Capital Markets analyst Fran B. Bernstein predicts Arctic Alaska will boost profits 6% this year, to \$15 million, on a 17% revenue jump, to \$145 million.

Federal fishing restrictions have helped the company. For years, Japanese fishermen were taking the lion's share of the cod, sole, and other bottom fish within the 200-mile range off Alaska's coast. In 1976, the Commerce Dept. began to limit their access, and U.S. boats moved in. Baker and Miller started

out hauling crab from two boats but soon switched to bottom fish, building a fleet of 20 vessels.

Now, Arctic Alaska is one of the largest fishing operations in the U.S. Its big market is Japan. While most U.S. boats sell large portions of their catch at sea to Japanese processing ships, Baker and Miller decided to turn their own boats into floating factories that gut, package, and freeze the fish. They have even gotten advice from Japanese consultants on aesthetics, and sales indicate that customers are impressed. Fish heads are cut off at clean, 45-degree angles, and fish are artfully arranged in the packages.

The future depends more heavily on steady supply and pricing. The low cod prices in Tokyo last year prompted Baker and Miller to rethink their strategy. Instead of relying on the Japanese for 70% of their revenue, they are trying to broaden the market by nailing down supply contracts in the U.S. So far, Arctic Alaska has cut one-year deals with such restaurant chains as Long John Silver's and Shoney's. And the company built its first land-based fish processing plant last December in Seattle. Now Baker and Miller must wait until their fish story catches on with Wall Street.

By Barbara Buell in Seattle



ARCTIC'S BAKER: REELING IN RECORD REVENUES

THE BEST SMALL COMPANIES

to win a position in this table, a company must excel in three ways. The selection process begins by ranking companies according to their three-year results in sales growth, earnings growth, and return on invested capital. The ranks that appear in the table are calculated from these numbers. A company's composite rank is the sum of 0.5 times its rank in return on total capital plus 0.25 times each of its growth ranks.

The companies used in the screening process were selected by Standard & Poor's Compustat Services Inc., which has computerized financial data on 7,700 publicly traded corporations. To qualify, a company must have annual sales of less than \$150 million, a

current market value greater than \$1 million, a current stock price greater than \$1, and be actively traded. Banks, insurers, real estate firms, and utilities are excluded. So are companies with sharp declines in current financial results.

Sales and earnings are latest available through the most recent 12 months. Earnings include net income from continuing operations, before gains or losses from extraordinary items. **Growth computations** are calculated using the least-squares method. If results for the earliest year are negative, the average is for two years. **Return on capital** is earnings plus minority interests and tax-adjusted interest expense expressed as a percent of total

debt and equity. For ranking purposes, the maximum allowable annual return on invested capital is 100%. If companies have made substantial accounting restatements, long-term returns may be averaged for two years instead of three years.

Time periods vary according to the month of a company's fiscal yearend. Profitability is calculated through the most recent fiscal year. Growth is calculated through the most recent fiscal year.

Stock price data are as of Apr. 28, 1989. A ● indicates that a company also appeared in last year's rankings (BW—May 23, 1988). An **alphabetical index** of the companies appears at the end of the table.

COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA			
	SALES \$ MIL	EARNINGS \$ MIL	INCREASE(%)		RETURN ON CAPITAL	STOCK PRICE		P/E RATIO	MARKET VALUE \$ MIL
			SALES	PROFITS		52 WEEK HIGH-LOW	RECENT		
1 T MEDICAL (TSQ) Roswell, Ga. 404-594-0475 Provides intravenous therapy in your own home	18.5	4.6	213.3	368.2	64.8	15—8	14	22	102
2 SOFTWARE TOOLWORKS (TWRX) Chatsworth, Calif. 818-885-9000 Publishes education, entertainment, and business software for PCs	8.9	1.5	148.3	244.3	39.7	8—4	8	35	49
3 CRITICAL INDUSTRIES (FYBR) Houston 713-923-1300 ● Sells equipment to clean asbestos right out of your walls	32.4	1.9	104.6	261.9	43.3	9—3	7	23	44
4 AMERICAN POWER CONVERSION (APCC) Peace Dale, R. I. 401-789-5735 Power systems for computers, surge protectors, and file savers	20.7	3.4	167.7	422.6	33.9	19—7	19	14	50
5 ADOBE SYSTEMS (ADBE) Mountain View, Calif. 415-961-4400 ● Sells graphic software for desktop publishing	94.8	24.5	160.9	237.6	35.4	27—16	27	24	553
6 ALDUS (ALDC) Seattle 206-622-5500 ● Designs page make-up software for desktop publishers	87.0	15.8	230.9	222.7	34.4	25—15	18	15	212
7 CATALINA LIGHTING (LTG) Miami 305-558-4777 Their fixtures light up your life	31.1	1.3	99.1	164.6	45.3	15—3	15	32	54
8 SILK GREENHOUSE (SGHI) Tampa 813-622-7886 The bloom is never off their roses: silk flowers, plants, and trees	55.2	3.7	151.6	144.1	35.0	26—9	23	28	111
9 HOME OFFICE REFERENCE LABORATORY (HORL) Lenexa, Kan. 913-888-8397 Blood and urine testing for insurance companies	77.2	20.9	98.1	156.3	37.1	30—9	13	9	179
10 RAINBOW TECHNOLOGIES (RNBO) Irvine, Calif. 714-261-0228 Sells protection systems to ward off software pirates	7.2	1.2	122.1	203.9	31.4	17—4	16	25	28
11 PENTECH INTERNATIONAL (PNTK) Edison, N. J. 201-287-6640 ● Makes crayons and specialty pens	17.8	2.0	126.9	268.2	26.6	5—2	4	23	46
12 TSENG LABS (TSNG) Newtown, Pa. 215-968-0502 Gussies up computers with add-on enhancement boards, graphics chip sets	27.2	4.4	98.0	173.8	33.1	4—1	3	14	60
13 EFI ELECTRONICS (EFIC) Salt Lake City 801-977-9009 To suppress that surge, makes gear to shield computers from rogue voltage	8.3	1.3	42.2	256.7	40.8	2—1	2	12	15
14 ONE PRICE CLOTHING STORES (ONPR) Duncan, S. C. 803-439-6666 ● Got six bucks? You can buy anything in the store	69.5	4.0	103.0	81.3	39.3	17—9	16	26	104
15 QUICKSILVER (QUIK) Costa Mesa, Calif. 714-645-1395 ● Surf and sporting togs that a little sand couldn't hurt	52.8	4.2	56.0	184.8	35.8	14—5	13	19	80
16 ALLWASTE (ALWS) Houston 713-623-8777 ● Someone's gotta do it: asbestos removal, glass recycling, oil vacuuming	105.7	8.0	61.0	103.6	45.1	18—10	17	26	182
17 CONVERGENT SOLUTIONS (CSOL) Laurence Harbor, N. J. 201-290-0090 ● Its tools and advice save time for programmers	10.5	3.7	70.1	228.7	26.5	5—2	3	4	15
18 SIGMA DESIGNS (SIGM) Fremont, Calif. 415-770-0100 ● Graphics-enhancers and monitors for the image-conscious PC	73.0	8.8	81.4	137.1	27.2	22—11	17	11	99

THE BEST SMALL GROWTH COMPANIES

RANK	COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA				MARKET VALUE \$ MIL.
		SALES \$ MIL.	EARNINGS \$ MIL.	INCREASE (%) SALES	PROFITS	RETURN ON CAPITAL	STOCK PRICE 52-WEEK HIGH LOW		RECENT	P/E RATIO	
19	CASCADE INTERNATIONAL (KOSM) Boca Raton, Fla. 407-338-8278 Looking good with its cosmetics and apparel businesses	23.6	4.4	72.9	95.4	37.0	4—2	3	11	45	45
20	PHOENIX TECHNOLOGIES (PTEC) Norwood, Mass. 617-551-4000 Matchmaker, matchmaker . . . tools for computer compatibility	58.8	10.2	79.7	111.2	30.6	19—12	16	17	152	152
21	CODE-ALARM (CODL) Madison Heights, Mich. 313-583-9620 ● Alarming news for any would-be car thief	21.7	1.5	76.2	95.6	29.9	15—7	14	20	30	30
22	DIGITAL MICROWAVE (DMIC) San Jose, Calif. 408-943-0777 It's ringing bells with fiber optics and microwave radio equipment	66.0	11.6	110.8	115.0	22.9	33—14	33	35	379	379
23	GOLDEN VALLEY MICROWAVE (GVF) Minneapolis 612-835-6900 ● Station-break popcorn and pancakes for the discriminating couch potato	146.5	16.3	84.7	137.3	23.3	33—20	25	18	291	291
24	NUTMEG INDUSTRIES (NUTM) Tampa 813-963-6153 Rah-rah! Whips up logo-laden T-shirts, etc., for sports fans and students	40.1	3.2	80.7	151.0	22.4	14—8	13	22	70	70
25	MELAMINE CHEMICALS (MTWO) Donaldsonville, La. 504-473-3121 Makes melamine, a raw material for laminates and coatings	39.7	6.9	23.4	107.6	51.1	15—10	14	11	74	74
26	SYSTEM SOFTWARE ASSOCIATES (SSAX) Chicago 312-641-2900 ● Programs and service support for Big Blue's machines	70.6	7.2	96.0	83.8	23.6	26—9	23	24	172	172
27	JAN BELL MARKETING (JBM) Fort Lauderdale, Fla. 305-741-2383 ● Wholesalers of baubles, bangles, and other such gewgaws	127.4	10.2	61.5	86.1	28.6	26—9	26	28	287	287
28	BALDWIN TECHNOLOGY (BLD) Stamford, Conn. 203-348-4400 Helps bring us to you: Makes press accessories for megaprinters	113.5	7.3	25.4	79.2	51.9	20—7	20	17	130	130
29	BOOLE & BABBAGE (BOOL) Sunnyvale, Calif. 408-735-9550 IBM mainframes can't have too much software. These folks write lots of it	68.1	4.8	25.3	140.0	31.1	20—8	19	14	64	64
30	HITOX CORP. OF AMERICA (HTXA) Corpus Christi, Tex. 512-882-5175 Mixes up pigments for high-tech paints and plastic plumbing	16.5	2.2	60.8	115.7	23.5	13—8	13	14	38	38
31	PREFERRED HEALTH CARE (PY) Wilton, Conn. 203-762-0993 ● Management and financial advisory services for psychiatric facilities	14.6	2.9	87.3	47.0	25.8	14—5	6	19	53	53
32	THRIFTY RENT-A-CAR (TFTY) Tulsa 918-665-3930 Rents wheels to traveling salesmen and other budget-conscious businessmen	100.2	10.4	86.0	66.2	23.4	21—10	19	17	174	174
33	VARITRONIC SYSTEMS (VRSY) Minneapolis 612-542-1500 Makers of Merlin, a machine that churns out adhesive-backed lettering	52.0	7.0	73.9	119.8	21.5	25—16	19	15	103	103
34	AUTODESK (ACAD) Sausalito, Calif. 415-331-0356 Software that tackles architectural and engineering jobs	117.3	32.7	57.7	71.7	24.3	35—23	33	25	795	795
35	TCBY ENTERPRISES (TBY) Little Rock 501-688-8229 ● Keeping waistlines trim at 1,200 frozen yogurt franchises	107.9	21.2	78.3	82.3	22.2	26—9	26	31	674	674
36	MARTIN LAWRENCE LTD. (MLLE) Van Nuys, Calif. 818-988-0630 ● Objets d'art sold at 27 galleries in California and the East	36.4	6.0	83.6	184.4	18.6	14—5	11	13	75	75
37	BALLARD MEDICAL PRODUCTS (BMED) Midvale, Utah 801-566-4693 From throw-away surgical scrubs to catheters, they've got them	17.1	3.3	90.1	459.7	15.8	18—10	17	28	87	87
38	MEDCHEM PRODUCTS (MCH) Woburn, Mass. 617-938-9328 ● Sells pharmaceuticals to hospitals, pharmacies, and drug companies	22.2	3.2	62.7	40.4	25.0	16—6	9	11	32	32
39	SUMMAGRAPHICS (SUGR) Seymour, Conn. 203-881-5400 Need a mouse or a paintbrush for your PC? They make them here	41.5	6.5	20.7	140.1	23.1	15—11	15	8	53	53
40	CADENCE DESIGN SYSTEMS (CDNC) San Jose, Calif. 408-727-0264 Makes software for designing integrated circuits	78.8	16.0	101.1	196.1	16.2	17—6	16	23	351	351
41	HOME INTENSIVE CARE (KDNY) North Miami Beach, Fla. 305-653-0000 Nursing for kidney dialysis patients	41.8	4.4	200.2	280.2	12.1	8—2	7	15	64	64
42	HOLIDAY RV SUPERSTORES (RVEE) Orlando 407-351-3096 Pick up a Winnebago or have your Airstream serviced	35.5	1.2	28.7	76.7	23.6	5—3	4	24	29	29
43	CORPORATE SOFTWARE (CSOF) Westwood, Mass. 617-329-3500 Sales, service, and evaluation of over 500 software titles	103.7	3.5	84.7	102.3	18.8	15—9	13	18	65	65
44	INTERVOICE (INTV) Richardson, Tex. 214-669-3988 Makes voice automation systems, including a robot operator	11.1	2.1	125.2	138.7	16.1	15—3	15	25	49	49
45	BOLAR PHARMACEUTICAL (BLR) Copiague, N. Y. 516-842-8383 ● Get healthy with their generic drugs	128.0	30.7	51.6	66.5	22.3	30—16	27	18	573	573
46	KIMMINS ENVIRONMENTAL SERVICE (KEVN) Tampa 813-248-3878 An environmental contractor, provides full-scale waste-removal services	79.4	1.6	180.7	261.1	11.2	8—4	7	14	85	85
47	CROWN CRAFTS (CRW) Calhoun, Ga. 404-629-7941 ● Keep cozy with their bedspreads and blankets	91.4	6.4	30.3	112.8	21.8	26—12	23	12	75	75

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Citicorp ニューヨーク
ドル・円は弱含み。”

“こちらは、輸出の
売りが強く、信託や
石油も買いオーダーを
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THE BEST SMALL GROWTH COMPANIES

COMPANY	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA			
	SALES \$ MIL.	EARNINGS \$ MIL.	INCREASE		RETURN ON CAPITAL	STOCK PRICE		P/E RATIO	MARKET VAL. \$ MIL.
			SALES	PROFITS		52-WEEK HIGH LOW	RECENT		
48 GROUP 1 SOFTWARE (GSOF) Greenbelt, Md. 301-982-2000 Software that makes direct mail a breeze	16.7	2.4	39.8	58.0	23.4	11 — 7	8	14	30
49 SWIFT ENERGY (SFY) Houston 713-874-2700 ● Explores the wilds for crude oil and natural gas	12.4	4.7	61.1	94.9	20.1	10 — 7	10	9	40
50 NETWORK EQUIPMENT TECH (NETX) Redwood City, Calif. 415-366-4400 Helping computers communicate with digital network exchange products	136.7	16.0	144.2	142.1	14.4	25 — 14	23	20	300
51 MDT (MDTC) Torrance, Calif. 213-618-9269 Rinse and spit. Equipment for dentists and doctors	98.6	4.9	139.8	232.3	12.9	15 — 10	12	12	50
52 INTERNATIONAL RECOVERY (INT) Miami Springs, Fla. 305-884-2001 Cleaning up contaminated sites and recycling hazardous wastes	55.7	2.0	113.8	140.6	14.5	12 — 8	11	19	30
53 ARCTIC ALASKA FISHERIES (ICE) Seattle 206-282-3445 Crab, cod, or pollack—the big ones didn't get away	119.8	14.1	73.6	102.5	18.6	15 — 7	9	9	120
54 CANONIE ENVIRONMENTAL SVCS. (CANO) Porter, Ind. 219-926-8651 ● Orchestrates cleanup of hazardous waste sites	48.0	5.4	29.2	35.8	26.7	28 — 20	24	25	130
55 DH TECHNOLOGY (DHTK) San Diego 619-451-3485 The dot-matrix head on your printer may be one of theirs	35.8	4.2	35.7	124.0	19.7	10 — 5	10	11	40
56 SHOREWOOD PACKAGING (SHOR) Farmingdale, N. Y. 516-694-2900 Packaging for music tapes, videos, and cosmetics	119.6	14.3	23.9	56.1	25.1	23 — 14	22	20	290
57 ST. JUDE MEDICAL (STJM) St. Paul, Minn. 612-483-2000 ● How can you mend a broken heart? With their artificial valves	125.8	38.6	58.4	66.8	20.3	38 — 14	37	23	840
58 SYMBOL TECHNOLOGIES (SBL) Bohemia, N. Y. 516-563-2400 Barcode readers, scanners—specialists in laser technology	105.6	15.8	86.6	325.7	10.6	27 — 15	19	23	340
59 IPL SYSTEMS (IPLSA) Waltham, Mass. 617-890-6620 Manufactures IBM-compatible software and storage units	8.4	1.6	55.3	79.8	19.5	7 — 1	6	18	20
60 SOFTWARE PUBLISHING (SPCO) Mountain View, Calif. 415-962-8910 Makes software for improvement of white-collar productivity	90.6	16.0	28.6	57.3	22.7	27 — 15	25	12	180
61 VIVIGEN (VIVI) Sante Fe, N. M. 505-988-9744 Test that germ. A lab for biochemists and bioengineers	6.4	1.0	55.9	118.1	18.0	12 — 5	11	27	20
62 CXR TELCOM (CXR) San Jose, Calif. 415-965-7100 Holding the line with modems and phone-testing gear	21.9	1.8	190.1	88.9	13.8	8 — 5	6	15	20
63 NEW LINE CINEMA (NLN) New York 212-239-8880 Hits include <i>Nightmare on Elm Street 5</i> , <i>Texas Chainsaw Massacre 3</i>	61.8	4.7	63.5	58.7	19.1	8 — 5	7	10	40
64 HEARTLAND EXPRESS (HTLD) Coralville, Iowa 319-645-2728 Provides trucking services for America's, well, you guessed it	37.7	5.3	21.9	23.5	24.9	15 — 9	13	13	60
65 FASTENAL (FAST) Winona, Minn. 507-454-5374 Sells nuts and bolts and fasteners	32.7	3.3	37.7	56.3	20.9	24 — 13	24	34	110
66 INDEX TECHNOLOGY (INDX) Cambridge, Mass. 617-494-8200 They develop software for systems analysts	31.3	2.8	43.6	65.1	20.0	15 — 7	9	14	40
67 EMCON ASSOCIATES (MCON) San Jose, Calif. 408-453-7300 Consultants to Silicon Valley on waste management	30.1	3.2	34.3	149.8	17.5	22 — 10	21	17	50
68 NICHOLS RESEARCH (NRES) Huntsville, Ala. 205-883-1140 ● Advanced technical services for defense contractors	46.1	2.5	42.9	49.4	20.6	8 — 6	7	9	20
69 DATAFLEX (DFLX) Edison, N. J. 201-321-1100 Sells, services PCs and peripherals	47.1	1.7	70.1	93.1	16.2	9 — 3	8	12	10
70 ALL AMERICAN SEMICONDUCTOR (SEMI) Miami 305-621-8282 Distributes electronic components: integrated circuits and transistors	33.1	1.0	44.4	277.6	13.6	4 — 2	3	11	10
71 ART'S-WAY MANUFACTURING (ARTW) Armstrong, Iowa 712-864-3131 Manufactures farm equipment, including grinder-mixers	23.6	2.0	30.1	37.0	22.1	13 — 5	12	8	10
72 STATE-O-MAINE (SOME) New York 212-244-1111 ● Sews men's fashions, namely trendy Christian Dior robes and active wear	68.9	4.9	35.3	50.5	20.4	18 — 12	15	11	50
73 MICROCOM (MNPI) Norwood, Mass. 617-551-1000 Makes modems and software that link computers together	59.3	7.6	49.8	116.2	16.0	18 — 10	15	16	110
74 CEM (CEMX) Matthews, N. C. 704-821-7015 ● Churns out analytical microwave equipment for lab testing	15.5	2.3	34.8	68.2	19.2	13 — 8	10	20	40
75 HARDING LAWSON ASSOCIATES (HRDG) Novato, Calif. 415-892-0821 A geotechnical engineering outfit	48.5	3.0	30.8	122.2	17.4	18 — 12	17	16	40
76 ST. IVES LABORATORIES (SWIS) Chatsworth, Calif. 818-709-5500 ● Manufactures and distributes health-and-beauty aids	103.9	4.5	14.1	63.9	20.8	18 — 7	17	26	110

Companies are finding some innovative ways to use computers.



Over the past fifteen years, billions of dollars have been invested in new information systems. And yet, productivity in many industries has actually declined.

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THE BEST SMALL GROWTH COMPANIES

COMPANY STOCK SYMBOL	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA			
	SALES \$ MIL	EARNINGS \$ MIL	INCREASE IN SALES	INCREASE IN PROFITS	RETURN ON CAPITAL	STOCK PRICE 52-WEEK HIGH LOW	RECENT	P/E RATIO	MARKET VAL. \$ MIL
77 CPAC (CPAK) Leicester, N. Y. 716-382-3223 Develops pollution control equipment for industrial use	25.3	1.3	34.8	98.6	17.9	7—4	7	12	1
78 UTAH MEDICAL PRODUCTS (UTMD) Midvale, Utah 801-566-1200 Provides critical care medical devices to hospitals	14.8	1.6	57.5	140.2	12.9	4—2	3	16	2
79 NATURE'S SUNSHINE PRODUCTS (NATR) Spanish Fork, Utah 801-798-9861 Makes and sells capsulated herbal remedies and other healthy goodies	46.2	3.6	15.6	128.2	18.4	12—5	10	15	5
80 BOSTON ACOUSTICS (BOSA) Peabody, Mass. 617-532-2111 ● The speaker of the house—and car	20.1	2.4	20.5	36.3	22.2	18—8	18	15	3
81 SANFORD (SANF) Bellwood, Ill. 312-547-6650 Makes felt-tip pens and other writing implements	110.7	18.1	13.6	56.5	21.0	36—23	36	20	35
82 APPLIED BIOSCIENCE INTL. (APBI) East Millstone, N. J. 201-873-2550 ● Owns and runs two toxicological research testing labs	49.3	4.0	28.1	71.4	18.7	26—15	25	20	8
83 LEGENT (LGNT) Pittsburgh 412-323-2600 Designs software for IBM mainframes	87.8	15.3	64.5	66.6	15.7	26—16	26	26	27
84 PAR PHARMACEUTICAL (PRX) Spring Valley, N. Y. 914-425-7100 ● Rings up profits with generic drugs	106.2	10.5	70.3	61.6	15.8	19—8	8	9	9
85 CAREERCOM (PTA) Middletown, Pa. 717-774-1477 ● Counseling and training for careers in arrears	131.4	8.5	63.0	82.3	14.4	15—7	8	12	9
86 DYNAMICS RESEARCH (DRCO) Wilmington, Mass. 508-658-6100 ● Technical services on weapons systems for Uncle Sam	92.1	3.9	15.0	25.4	21.8	11—7	8	10	4
87 TRADITIONAL INDUSTRIES (TRAD) Agoura Hills, Calif. 818-991-2773 ● Markets custom photographic packages, products, and finishing services	54.5	5.9	53.8	83.1	15.4	12—7	9	6	3
88 HELEN OF TROY (HELE) El Paso 915-779-6363 Makes blow dryers and other personal hair-care appliances	92.0	7.9	31.0	50.0	19.0	23—10	22	10	7
89 SOUND ADVICE (SUND) Fort Lauderdale, Fla. 305-922-4434 ● Retailer of audio, video, and car hi-fi equipment	71.5	2.8	46.4	47.5	18.3	13—5	12	13	3
90 CSS INDUSTRIES (CSS) Philadelphia 215-569-9900 Makes metal containers, holiday decorations, and sells business forms	134.4	13.3	91.4	44.1	15.4	22—11	21	7	8
91 JUNO LIGHTING (JUNO) Chicago 312-827-9880 Manufactures track and recess lighting	61.8	11.1	16.8	21.6	21.1	26—13	16	13	14
92 UNIFORCE TEMP. SERVICES (UNFR) New Hyde Park, N. Y. 516-437-3300 Need help? Uniforce provides temporary workers to employers nationwide	100.7	3.1	24.5	30.1	20.5	17—11	15	22	6
93 PLAINS PETROLEUM (PLP) Lakewood, Colo. 303-969-9325 Adventures in oil and gas exploration and production	38.5	11.0	35.2	35.4	19.3	32—24	31	26	28
94 BUFFETS (BOCB) Eden Prairie, Minn. 612-942-9760 ● Country cooking from this restaurant chain	71.8	3.9	76.0	63.6	14.2	21—11	20	32	12
95 WISCONSIN TOY (WTOY) Milwaukee 414-274-2575 Wholesaler and retailer of children's toys	53.9	3.7	30.0	61.1	18.5	11—5	11	14	5
96 DIAGNOSTIC PRODUCTS (DP) Los Angeles 213-776-0180 ● Makes testing kits for medical facilities	50.5	13.1	27.5	47.0	19.4	46—37	41	20	24
97 MEDSTAT SYSTEMS (MDST) Ann Arbor, Mich. 313-996-1180 Provides health care information for data bases	7.7	0.9	45.4	56.3	17.4	12—9	11	31	2
98 ANALYSTS INTERNATIONAL (ANLY) Minneapolis 612-835-2330 Which computer to buy? Ask the experts	83.8	4.3	17.0	45.4	19.7	19—8	19	16	6
99 BIOMET (BMET) Warsaw, Ind. 219-267-6639 Doctors like their orthopedic devices	129.4	19.1	46.0	54.9	17.1	33—16	32	31	58
100 GERAGHTY & MILLER (GMGW) Plainview, N. Y. 516-249-7600 Long Island's consultants on groundwater	38.0	2.2	38.0	47.0	17.9	15—9	13	34	7

ALPHABETICAL INDEX OF COMPANIES

The number that follows each company name indicates its ranking in the table

Adobe Systems 5	Buffets 94	Diagnostic Products 96	International Recovery 52	Nutmeg Industries 24	St. Jude Medical 57
Aldus 6	Cadence Design Sys. 40	Digital Microwave 22	Intervoice 44	One Price Clothing 14	State-O-Maine 72
Ali Amer. Semiconductor 70	Canonie Environ. Serv. 54	Dynamics Research 86	IPL Systems 59	Par Pharmaceutical 84	Summagraphics 39
Alliwest 16	Careercom 85	EFI Electronics 13	Jan Bell Marketing 27	Pentech Intl. 11	Swift Energy 49
American Power 4	Cascade Intl. 19	Emcon Associates 67	Juno Lighting 91	Phoenix Technologies 20	Symbol Technologies
Analysts Intl. 98	Catalina Lighting 7	Fastenal 65	Kimmins Environmental 46	Plains Petroleum 93	System Software 26
Applied Bioscience Intl. 82	CEM 74	Geraghty & Miller 100	Legent 83	Preferred Health Care 31	TCBY Enterprises 35
Arctic Alaska Fisheries 53	Code-Alarm 21	Golden Valley 23	Martin Lawrence 36	Quiksilver 15	Thrifty Rent-A-Car 3
Art's-Way Mfg. 71	Convergent Solutions 17	Group 1 Software 48	MDT 51	Rainbow Technologies 10	Traditional Industries
Autodesk 34	Corporate Software 43	Harding Lawson Assoc. 75	MedChem Products 38	Sanford 81	Tseng Labs 12
Baldwin Technology 28	CPAC 77	Heartland Express 64	Medstat Systems 97	Shorewood Packaging 56	T? Medical 1
Ballard Medical Prod. 37	Critical Industries 3	Helen Of Troy 88	Melamine Chemicals 25	Sigma Designs 18	Uniforce Temp. 92
Biomet 99	Crown Crafts 47	Hiltex 30	Microcom 73	Silk Greenhouse 8	Utah Medical Product
Bolar Pharmaceutical 45	CSS Industries 90	Holiday RV Superstores 42	Nature's Sunshine 79	Software Publishing 60	Varitronic Systems 3
Boole & Babbage 29	CXR Telcom 62	Home Intensive Care 41	Network Equipment 50	Software Toolworks 2	Vivigen 61
Boston Acoustics 80	Dataflex 69	Home Office Reference 9	New Line Cinema 63	Sound Advice 89	Wisconsin Toy 95
	DH Technology 55	Index Technology 66	Nichols Research 68	St. Ives Laboratories 76	



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HOT STARTUPS ABROAD: THE WORLD IS THEIR MARKET

The soaring small businesses of Europe and Asia share a global perspective

Small may still be beautiful. But to make it these days, you also have to think big. That's the word from the ranks of today's successful international entrepreneurs. They are borrowing proven techniques—and even some of the talent—from bigger competitors, and they are moving beyond their home markets. The risk-taking culture that spawned thousands of new companies and millions of new jobs this decade in the U.S. is taking root abroad.

BUSINESS WEEK's annual survey of hot international growth companies shows that from costume jewelry to software programming to filtration systems, entrepreneurs are selling products beyond

their national borders and combing the world for acquisitions. Whatever their methods, they all see that to keep growing in the next decade, a global perspective is a must.

A changing financial scene is also forcing small companies to act more like big ones. Seed capital for lone entrepreneurs is withering as business has realigned itself in the postcrash environment. Now, the big financial backers are favoring corporations with proven track records and potential. What they are particularly interested in financing are leverage buyouts (table), backing dealmakers who take companies private and promise to squeeze out more value. "Funds avail-

able for MBOs [management buyouts] and LBOs have at least doubled in the past 12 months," says Munich venture capitalist Hans-Dieter Koch of the Matuschka Group.

GALVANIZED. Nowhere are these trends more pronounced—or more important—than in Europe. There, the removal of internal barriers by 1992 is galvanizing startups, as much as their bigger brethren, to treat the Continent as a vast single market. In fact, many of Europe's small companies may have no choice but to move quickly. The opportunities inherent in a unified European market are invigorating the Continent's once-sleepy giants, which are now merging and acquiring in an effort to establish footholds throughout Europe. The small business warns Matuschka's Koch, "have to wake up or they'll be taken over."

But the 1992 phenomenon is also creating opportunities for the small. Many already are lining up their acquisition targets, with venture capital

EUROPE'S INVESTORS PLAY IT SAFE

Investment	Percent of venture capital invested		
	1986	1987	1988*
EARLY STAGE	17.4%	12.7%	11.0%
EXPANSION	50.6	45.0	40.5
LBO	30.2	39.9	45.5
TURNAROUND	1.8	2.4	3.0
TOTAL Billions	\$2.1	\$3.2	\$4.3

*BW estimates

DATA: EUROPEAN VENTURE CAPITAL ASSN./BW

s now favoring expansion-minded managers. Consider the current hostility by five-year-old French ad agency DP for Britain's Boase Massimi Pollitt agency. "It's revolutionary for a small French company to leave France, attack, to understand finance," claims Olivier Millet, editor of a French venture-capital newsletter.

Until now, the service sector hasn't been quite the same engine of growth overseas as it has been in the U.S. But it's changing as deregulation transmits such industries as media, financial services, and telecommunications. "Services have been the big hole in the European economy," says Bruno Bertocci, manager of the five-month-old European Merging Company Fund. "But people are just as demanding of services, the intellectual skills are there, and it's bound to be the sector to watch."

ENDY BOUTIQUES. In Asia, rising standards of living and growing consumer demand in such countries as Japan, Taiwan, and South Korea are creating new markets overnight. More than half of Japan's startups are now in services. In the newest wave of Japanese small business, entrepreneurs make everything from tofu to software to designs for endy boutiques. "The Japanese used to think changing jobs meant losing your job," notes Nobuo Matsuki, managing partner of venture house Schroders PTV Tokyo. "Young Japanese are willing to take a chance on a good idea."

One of the biggest stimulants to growth around the world is the revolution in retailing and distribution. New technology is allowing companies to get customers what they want fast—without traditional distribution hassles. Nowhere is this more true than in Japan. Menswear retailer Aoki International offers discount suits while making big margins: It cuts out the notorious middleman and orders directly from the manufacturer. German retailer Hornbach is blanketing the country with a format borrowed from the U.S.—the home-repair megastore. And Britain's fast-growing Waterstone's bookstore chain is using an old-fashioned concept: superior service with trained booksellers and longer hours than competitors.

Yet for all the promise of new markets and exploitable gaps in old ones, some familiar problems stand in the way of the hot growth companies. Chief among them is the cautious financial climate. MMG Patricof Group, one of Europe's first venture houses, has turned its attention to mature companies, funding buyouts and "buy-ins," deals that bring in new management and money into existing companies. The group has just raised \$150 million for buy-ins and is aiming at \$350 million. What's more, some international stock markets, more

than 18 months after the crash, remain cool to high-flying growth companies, slowing new public stock issues.

On top of the worries about capital are long-standing problems of management control. The boards of two formerly hot British companies, employment-services agency Blue Arrow PLC and retailer Next PLC, dumped their chief executives within the past six months after expansion programs left both outfits overstretched. In Japan, Schroders PTV had to step into management to save an investment when one of its export-

dependent companies was nearly bankrupted "five or six times" by the rising yen, says Matsuki.

Those are important danger signs as today's breed of hot growth executives pushes into new markets, risking confrontation with bigger competitors. But if they heed the warnings and remain true to their founding spirit while carefully managing growth, thinking big need not mean bigger problems.

By Richard A. Melcher in London, with John Templeman in Bonn, Ted Holden in Tokyo, and bureau reports

CHEVALIER (OA) HOLDINGS

A FAST RIDE ON HONG KONG'S HIGH-TECH WAVE

As the financial and business center for China and Southeast Asia, Hong Kong is on a buying binge for electronic office gadgets. An emerging class of young dealmakers is snapping up record numbers of fax machines, telephone switches, and portable computers. Take faxes. Written Chinese cannot be easily typed, so faxing is becoming a way of life. The number of fax lines in Hong Kong has jumped fourfold, to 70,000, in the past three years.

Getting rich off the boom is Hong Kong's Chevalier (OA) Holdings Ltd., the local agent for Japanese giants Toshiba, NEC, and OKI. Chevalier Chairman Chow Yei Ching is one of Hong Kong's new-wave entrepreneurs. Now that most old-line industrialists have shifted factories across the border into China to cut labor

costs, the big growth in the Crown Colony is in services and imports of consumer and high-tech gear.

Chow, 53, fled Communist China as a teenager in 1952. After studying mechanical engineering in Taiwan, he worked for Japan's Hitachi before starting his own elevator sales business in 1970. He rode the construction boom of the 1970s in Hong Kong and diversified into office equipment in 1979.

POLYGLOT. Understanding the Japanese mentality helps in his dealings with suppliers. His wife is Japanese, and he speaks the language fluently, as well as English and four dialects of Chinese. As Toshiba's sole agent in Hong Kong, Macao, and China, the once-poor immigrant has become a multimillionaire.

Little-known among the local stock exchange pros, Chevalier has increased profits fivefold over the past three years, to an estimated \$5.7 million, on sales of about \$77 million in 1988. With his Hong Kong base strong, Chow is looking to new markets. Last December he moved into Thailand, which is modernizing its phone system. He is also selling Toshiba products in Canada. To lessen his dependence on the Japanese, Chow is turning to Korean as well as American companies such as MiniScribe for hard-disk drives and AT&T for minicomputers.

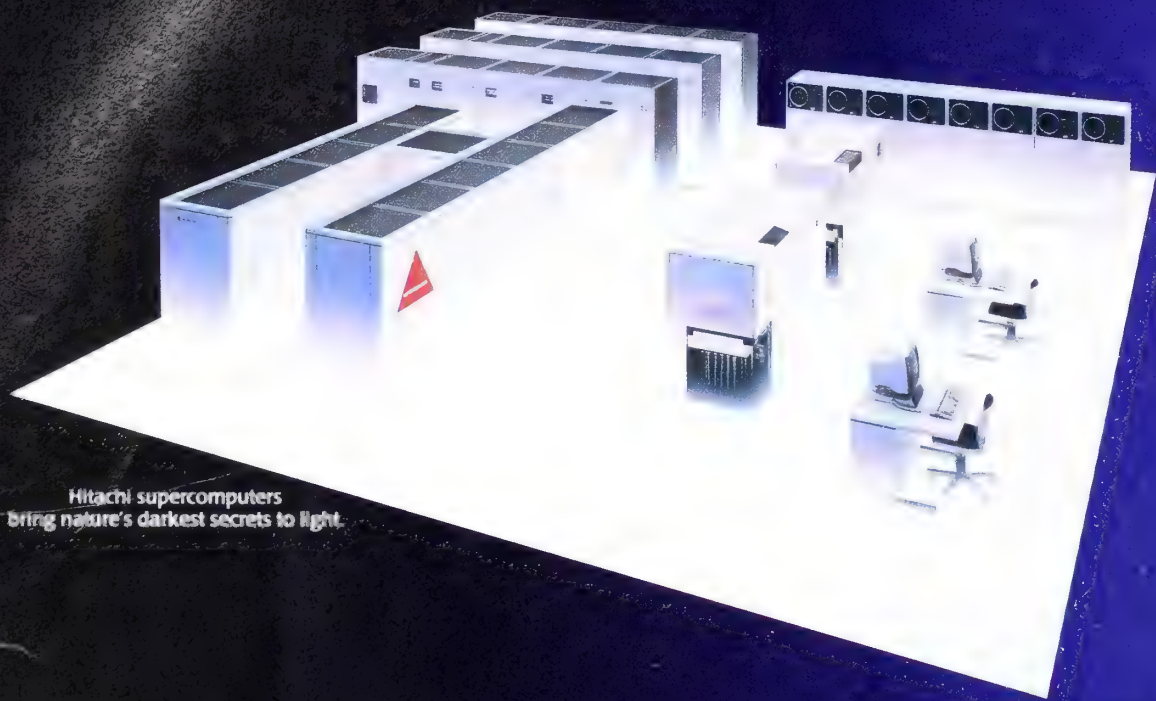
Competition will toughen as a number of Japanese giants like Sharp, Sanyo, and Mitsubishi push deeper into his lucrative markets. But Chow is used to uphill battles: "When we came from Shanghai, my father didn't bring one penny with him," he declares. And for the moment, there isn't too much to worry about. New Hong Kong companies with big orders for telephone systems and fax machines keep popping up every day.

By Dori Jones Yang in Hong Kong



FAXMAN CHOW: BEING THE LOCAL AGENT FOR JAPANESE GIANTS TOSHIBA, NEC, AND OKI HAS MADE HIM RICH

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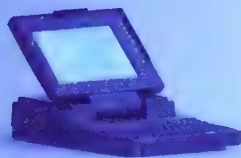
to calculate molecular orbits. Or quantum electromagnetics. And for these people, Hitachi offers a wide range of computers that can meet any need. In any field.

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*US\$45,736 million, net sales for the year ending March 31, 1988 US\$1 = ¥125



HITACHI

Hitachi, Ltd. Tokyo, Japan

SAFILO

AN EXPORT FOCUS AT ITALY'S FARSIGHTED FRAME COMPANY

You can find sexier, more-high-tech companies in Italy. But few better represent the sizzling success of Italy's medium-size exporters—the key to the country's economic miracle—than Safilo. Based in the northeastern city of Padua, a traditional center of the optical industry since the Renaissance, Safilo is the top Italian manufacturer of eyeglass frames. And it's booming.

Last year, the company sold more than 5 million pairs, from \$75 plastic models to the \$450 designer frames that go like hotcakes in Tokyo. Its 1988 sales rose 16%, to \$133 million, and profits hit a record \$10 million. The key to success has been the ability to graft modern marketing and technology onto traditional knowhow. Chairman Giuliano Tabacchi has invested heavily in computer-aided design and manufacturing at Safilo's four plants. And he owns licenses to names like Gucci, Ferrari, and Missoni.



THE TABACCHI BROTHERS: THEIR \$450 DESIGNER FRAMES SELL LIKE HOTCAKES IN TOKYO

Giuliano and brother Vittorio, general manager, took Safilo public in 1987. The absence of a strong over-the-counter market in Italy deters many companies from public offerings on the clubby Milan Bourse. "But we felt we needed to go public in order to keep on growing," says Tabacchi, who with other family members controls 65% of Safilo stock.

And he's not stopping: Last Decem-

ber, Tabacchi plunked down \$10 million for Optique du Monde Inc. of Syosset, N. Y., giving him use of the Polo-Ralph Lauren name. But Safilo's not all business. Last year, it paid nearly \$500,000 for 17 pairs of one-of-a-kind glasses, belonging to nearsighted rock star Eric Clapton. Safilo is sending them on a world tour later this year.

By John Rossant in Rome



CHAIRMAN CHATAWAY: MULLING A BID FOR ONE OF THE THREE NEW BRITISH CHANNELS

CROWN COMMUNICATIONS

BRITAIN'S BIGGEST NEW RADIO STAR

Fifteen years ago, Christopher Chataway, then a Conservative MP, wrote the book on Britain's commercial radio system: He was the minister in charge of guiding through government the 1972 law that opened the

airwaves. Now the Thatcher government is taking broadcast deregulation to the next stage, creating three new national channels and easing public-service programming requirements. And Chataway is still in the thick of it, this time poised to cash in as executive chairman of Crown Communications Group PLC.

One of Britain's most aggressive young media companies, Crown is the product of a merger a year ago that combined a London radio franchise with a TV production company. Australian banker and TV station owner David S. Haynes, who smelled deregulation in the wind, made the deal and lured Chataway

from the banking post he then held.

Crown's success has been meteoric, attracting advertisers and investors alike. Consolidated sales have grown from \$12.5 million in 1987 to an estimated \$25.5 million this year, while pre-tax earnings rose from \$1.5 million to what may be \$9.8 million this year. Crown stock, 25% of which is controlled by Haynes, was the best performer last year on London's over-the-counter market. This showing lured American media investor, John W. Kluge, to acquire Crown. Chataway is preparing for a new sprint with a possible bid for one of the three new channels. He's strengthening Crown's TV production arm to get some of the 25% of work that BBC and commercial stations must fall out to independents. And Crown, with an eye on 1992, is looking at the fragmented European radio scene. In April, the company paid \$2.5 million for a 33% stake in the loss-making, Paris-based radio network RFM and plans to pump \$17 million in the next few years. Says Chataway: "We would like to be the European market leader in radio." But he sees the risks of success, too. "Spectacular crashes come from megalomania in the media," he says. "That is something we will try to avoid."

By Richard A. Melcher in London



MR. MAX

A CAREFUL CLONE OF K MART CAPTIVATES JAPAN

When Hisashi Hirano first heard of U.S. mass-retailer K mart Corp. in the mid-1960s, he couldn't wait to get a closer look. So the Japanese shop owner grabbed his camera and headed for America. Astonished by the mammoth scale of a West Coast K mart, Hirano, 61, took dozens of photos as he paced the aisles—until a furious store manager confiscated his film and told him to get out. Recalls Hirano: "That was one English expression I understood."

The unfriendly dismissal didn't dampen his awe of the K mart concept, though. He now runs Mr. Max Corp., one of Japan's hottest-growing discount retail chains. Based in Fukuoka, 700 miles southwest of Tokyo, the chain draws customers who like its low prices and huge size. Shoppers range across

2,500 square meters of floor space—40 times the national average. Mr. Max's 16 stores stock 30,000 items, from Pampers diapers to Panasonic word processors. And prices are 30% below those charged by Japan's tiny mom-and-pop retailers. One further American touch: Each store has parking space for 500 cars.

DIRECT LINE. For 53 years, Hirano's family ran a small electronics shop jammed full of goods at typically high prices. But frustrated by Japan's sticky-fingered distributors, Hirano started looking for a cheaper way of doing business. His search stopped at K mart.

Banks covered 75% of startup costs, and Hirano paid them back in just one year, thanks to brisk sales. Since going public in 1986, Mr. Max has doubled sales to \$170 million. Profits jumped 49.7% last year, to \$5.2 million. Like K mart, Mr. Max cuts costs by dealing directly with manufacturers. And a new \$2.3 million computer system is improving product management. Meanwhile, Mr. Max sends managers to America each year to scour K marts for new ideas. Hirano advises that they steer clear of store managers.

By Ted Holden in Fukuoka

MEMTEC

NEARLY BUBBLING UP FROM TOWN UNDER

Denis M. Hanley recalls how five years ago, whenever his company sold one of its high-tech filtration systems, he would celebrate by hosting barbecue for the entire staff. These days, with worldwide sales of \$55 million, Hanley would find himself cooking steaks and sausages every day of the week if he kept up the tradition. Indeed, Hanley's company, Memtec Ltd., based in Windsor, Australia, is taking off. Spun off from Baxter Travenol Laboratories Inc. by Hanley and other managers in 1983, Memtec makes sophisticated fluid-filtration systems based on membrane technology. The company has done what few Australian small businesses have done: set its sights internationally. Capitalized at \$95 million, boasts part-owned units in Europe, Japan, and the U.S. and employs 700 people worldwide. Hanley, a 41-year-old Australian accountant and Harvard MBA, tapped up Brunswick Corp.'s filtration divisions in the U.S. and Europe for \$70 million in 1988 and is currently negotiating another buy in Europe.

Memtec's strategy has been to find new applications for membrane filtration



HIGH ON FIBER: HANLEY'S HIGH-TECH FILTRATION DEVICES CAN CLEAN SEWAGE OR PURIFY WINE

technology in a market traditionally serviced by conventional, higher-cost technology. It zeroes in on high-volume fluid flows, such as sewage and impure water. The tapping of Australia's local technological talent has brought revenues up from a mere \$28,000 in 1984 to \$55 million by the end of 1988. At the end of the first half of 1988, Memtec announced a 58% rise in profits from a year before as a result of the Brunswick addition and internal growth. Traded through American depository receipts on the New York Stock Exchange, Memtec has been climbing steadily since the 1987

crash. It currently trades at \$1.80, up from \$1.03 early this year.

Memtec is now building systems for water purification and desalination, wine and fruit-juice separation, and filtration and sewage treatment. Says Hanley: "The concept now is to graft this new high-growth division onto the [existing] successful base." Not only does Memtec have the people and the technology to continue growing, he adds, but with \$63 million from a 1987 rights offering, "we have the money." So Hanley won't have any problem paying for the steaks.

By Stephen Hutcheon in Sydney



Long before they were building appliances

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Commentary/by Dave Griffiths

HIGH-TECH WEAPONS ARE COMING UNDER FRIENDLY FIRE

To the Reagan Administration, the B-1 was more than just a sleek new bomber. It symbolized the comeback of the U.S. military. In one of his first acts as President, Ronald Reagan revived the \$27 billion project, previously junked by Jimmy Carter. The Air Force got the renamed B-1B into service on time and under budget.

Today, the B-1B has become a symbol of something else—a very costly weapon that has failed to live up to its promise. The reason: A vital part of the plane's electronic nervous system, the equipment that jams the radars of enemy anti-aircraft weapons, doesn't work. It must be redesigned—at the cost of \$1.2 billion.

'SNOWED.' Sadly, the B-1B is not an isolated case. New weapons technologies have often proven prone to failure. Yet highly complex, computerized weaponry has become a cornerstone of U.S. military policy. That's because the U.S. cannot or will not match the Soviets in numbers of troops and conventional weapons. But after the reverie of Reagan's \$2 trillion defense buildup, the Pentagon is waking up to find that one high-tech weapons program after another is encountering problems. "We are just snowed with technology," says General Bernard P. Randolph, the Air Force's top weapons buyer.

Now, a growing backlash is brewing among some Pentagon top brass. Randolph bluntly terms defense electronics a "goddamn disaster." And General Larry D. Welch, the Air Force chief of staff, blames "unrealistic requirements, overoptimistic contractors, and poor management" for the snafus in electronic combat gear.

The problems go beyond the Air Force. Faith in technology caused the Army to get carried away in designing the LHX multipurpose helicopter. To halve manpower costs, the service wanted the chopper to be so automated that it wouldn't need a co-pilot.

But officials soon found that a com-

puterized gadget called an "automatic target recognizer" left a great deal to be desired. While it can tell a tank from a truck, it doesn't do very well in distinguishing an enemy tank from a friendly tank. A single pilot flying close enough to the ground to be busy dodging trees wouldn't always have the time to verify targets. So the Army



B-1B BOMBER: FAILING TO LIVE UP TO ITS PROMISE

is likely to fall back on the tried-and-true two-person cockpit.

With juicy contracts at stake, defense electronics makers are by no means blameless for inflating expectations. That was all too apparent with the B-1B. Air Force sources say that Eaton Corp.'s AIL Div., which developed the jamming system, exuded a confidence that wowed those who knew little about such arcane matters.

The Army's 'automatic target recognizer' couldn't tell an enemy tank from a friendly tank

"We looked at their brochure and said 'Let's do it all,'" says Colonel John Madia, the B-1B program manager. Too often, though, the promised technology disappoints. As Gary L. DeMan, deputy director of the Air Force Wright Research & Development Center in Dayton, notes: "Remember—the best thing you hear about a technology is the first thing you hear about it."

Details are hard to come by, but it's clear that the glitches in Eaton's system involve its radar-warning receiver and the computer that is supposed to initiate jamming signals. Randolph says the Air Force bomb office has now set "realistic expectations" for what the system can do.

STRAIN. Does that mean the military has learned its lesson? The Air Force's Advanced Tactical Fighter (ATF) may prove to be an interesting test. As designed, the plane's computers would require more than a million lines of software—a fivefold increase over the program in the F-16s it will replace.

But Randolph says the generals are beginning to question the trade-offs. Taking full advantage of such a complex program would strain the capacity of the computers and reduce reliability, so the brass is telling designers that pilots may not need the ultimate cockpit automation. "We don't have people smart enough to understand how to control technology in design sense," says Randolph, who started a software literacy program.

Perhaps most important, officers such as Randolph are taking a more skeptical view of the future. The political rush to build highly automated weapons before they are completely developed is yielding to caution. No longer will the blue-skies technologists who design the flashiest electronic black boxes automatically get a favorable hearing. Nor should they.



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Seventh Anniversary.

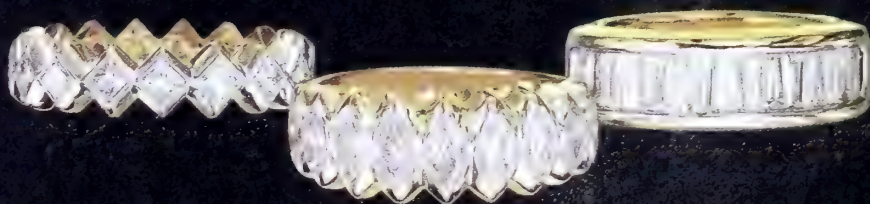


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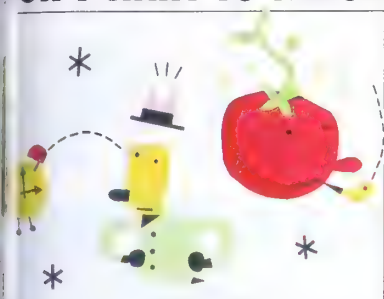



JAGUAR
A BLENDING OF ART AND MACHINE

Developments to Watch

EDITED BY EMILY T. SMITH

FINALLY, A TOMATO YOU DON'T WANT TO THROW TOMATOES AT



Modern agriculture has filled supermarket shelves with fresh and tasty produce. But have you ever wondered what happened to the tomato? Today's pale, tasteless excuse is a far cry from the home-grown fruit. The reason: To

increase their shelf life, tomatoes are picked while still green, clipped, and then forced to ripen with ethylene gas.

Now, plant scientists at Cornell University have developed an inexpensive treatment that could extend the shelf life of stiffer, vine-ripened varieties. They took their cue from an obscure Brazilian tomato that keeps for several weeks even if it is picked when fully ripe. It turns out that this long-lived tomato has nearly three times the level of polyamines, chemicals that retard ripening. Led by Peter J. Davies, a Cornell plant physiologist, the research team developed a process for fusing fresh-picked tomatoes with very small amounts of these naturally occurring substances. In laboratory-scale tests, the treatment doubled the shelf life of vine-ripened tomatoes, making them competitive with the supermarket type. The next step: Tap the genes in the Brazilian tomato to create new varieties with longer shelf lives.

PONS AND FLEISCHMANN STIR THE FUSION-IN-A-BOTTLE DEBATE AGAIN

Don't write off cold fusion yet, insist B. Stanley Pons of the University of Utah and Martin Fleischmann of the University of Southampton. Addressing a meeting of the Electrochemical Society in Los Angeles on May 8, the scientists responded to the blistering criticism of their fusion-in-a-bottle experiment leveled by physicists a week earlier.

The controversial pair not only continued to claim that nuclear fusion is indeed occurring in their apparatus, they dramatically upped their estimate of the energy they say their reaction is producing. In their startling initial announcement on April 23, Pons and Fleischmann said the experiment was producing four times the energy it consumed. At the electrochemical meeting, they said their fusion cell is now releasing 10 to 100 times that amount. But many scientists at the session remained unconvinced. "I really think they blew it," said California Institute of Technology physicist Steven E. Koonin.

SONY EXPANDS ITS HDTV WORK—AND ASKS UNCLE SAM TO CHIP IN

Japan's Sony Corp., which last year was dickering to buy MGM/UA Communications Co. but called off the deal, has decided to take over Hollywood via technology—and soften up Capitol Hill on the touchy issue of high-definition television. Late last month, the company announced that the Sony Corp. of America Technology Center in San Jose will be expanded to include a new Advanced Video Technology Center.

The new center's main mission: to develop wider applications for HDTV technology in moviemaking. A few filmmakers, such

as Francis Ford Coppola, already are HD-video enthusiasts, as are several production studios that specialize in advertising spots and industrial films. Panavision Inc., a major supplier of 35mm movie cameras, recently disclosed that it was adapting Sony's HDTV cameras for cinematography.

In addition, the new AVT center will serve as a domestic hub for Sony's research on HDTV for consumer markets. Sony has applied for a slice of the \$30 million HDTV program being organized by the Defense Advanced Research Projects Agency. That has touched a nerve in Congress. Some legislators object to DARPA's subsidizing research by a foreign company. Sony-America officials bristle at that, since from 1972 nearly all Sony color TV sets sold in the U.S.—plus many of those exported to Latin America—have been made in San Diego.

BE COOL IF YOU WANT TO TACK SUPERCONDUCTORS TO SILICON

If scientists could harness high-temperature superconductors in computer circuits, it could pave the way for new generations of ultrahigh-speed computers. But most processes used in making perfect crystalline films out of superconducting materials have required such high temperatures that they could not be deposited on silicon.

Now, researchers from North Carolina State University say they have developed a lower-temperature process. And the team says that their films on silicon can carry 1 million amperes per square centimeter when cooled to -321°F by liquid nitrogen. That's the minimum current capacity needed for silicon chips. The NCSU researchers, led by Jagdish Narayan, a professor of materials science, use a laser to strip atoms from a sample of superconductive ceramic, which are then deposited onto silicon in a vacuum. Narayan says the NCSU process has reduced processing temperatures from 1,202°F to 932°F.

PUTTING THE PITH BACK INTO TELEPHONE POLES

You pass one every couple hundred feet or so during the drive to work. But how many utility poles do you really notice? If you do look closely, you may be in for a shock. Perhaps 20 million of the nation's 130 million wooden poles are so rotted or riddled with termites that they are in danger of toppling over. And replacing them is expensive: Installing a new pole can cost as much as \$15,000.



So Lynco Power Constructors Inc. in Tucson has developed a so-called internal splint to shore up rotted poles. Just drill a hole or holes in the problem area and pump in a special polyurethane mixture. The plastic fills the voids, then quickly hardens to a wood-like consistency. In just minutes, the pole's life has been extended a decade or more. Cost? About \$400.

Lynco developed the technique for Hawaiian Electric Co., which has some 5,000 "danger poles." Many are hollow up to the 18-foot level. "They're literally like straws in the wind," says Lynco President Thomas A. Norton. For utility companies in the South, where woodpeckers are the main scourge of poles, Lynco has a king-size syringe that injects just enough polyurethane to fill yesteryear's peckings.

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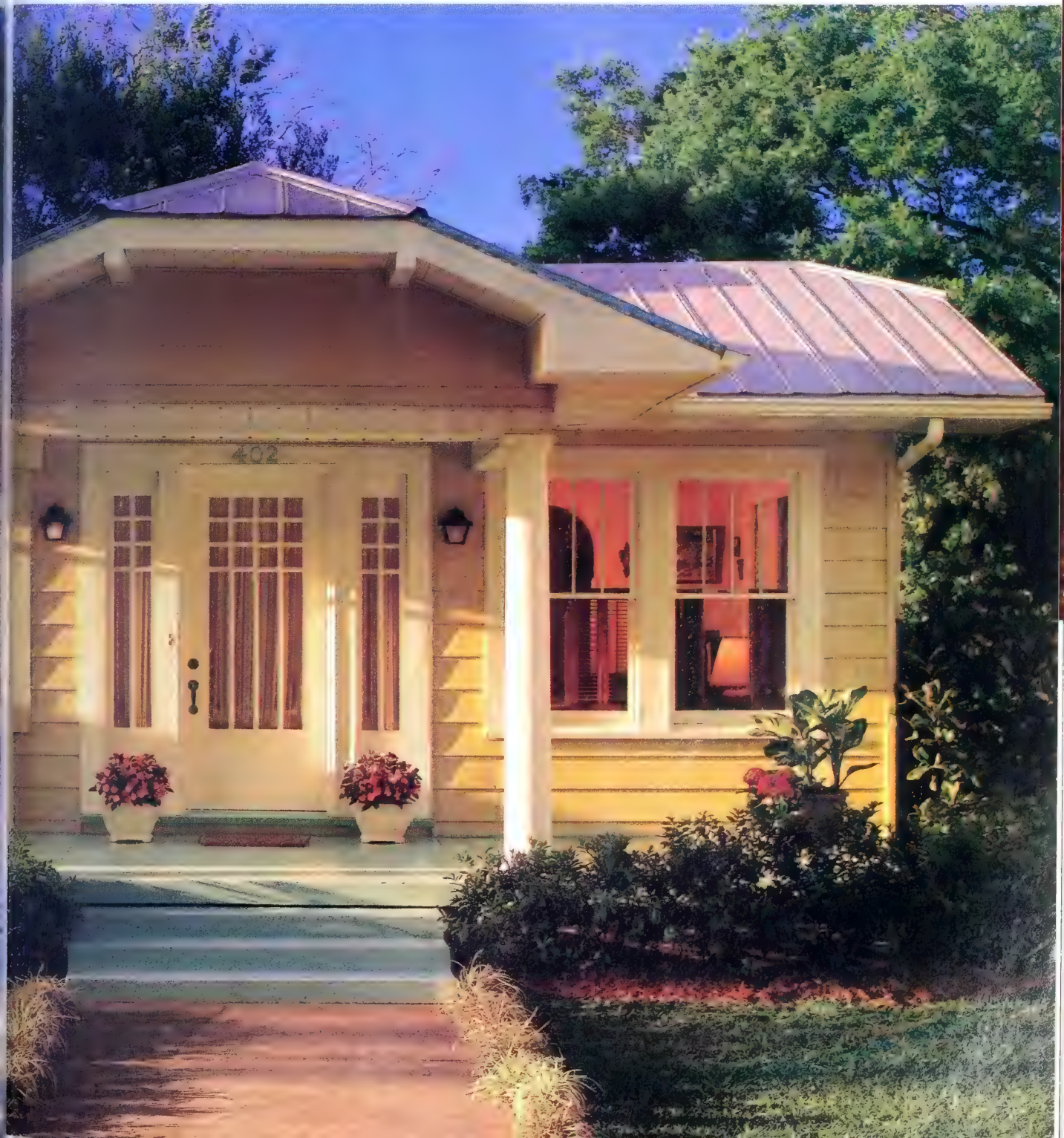
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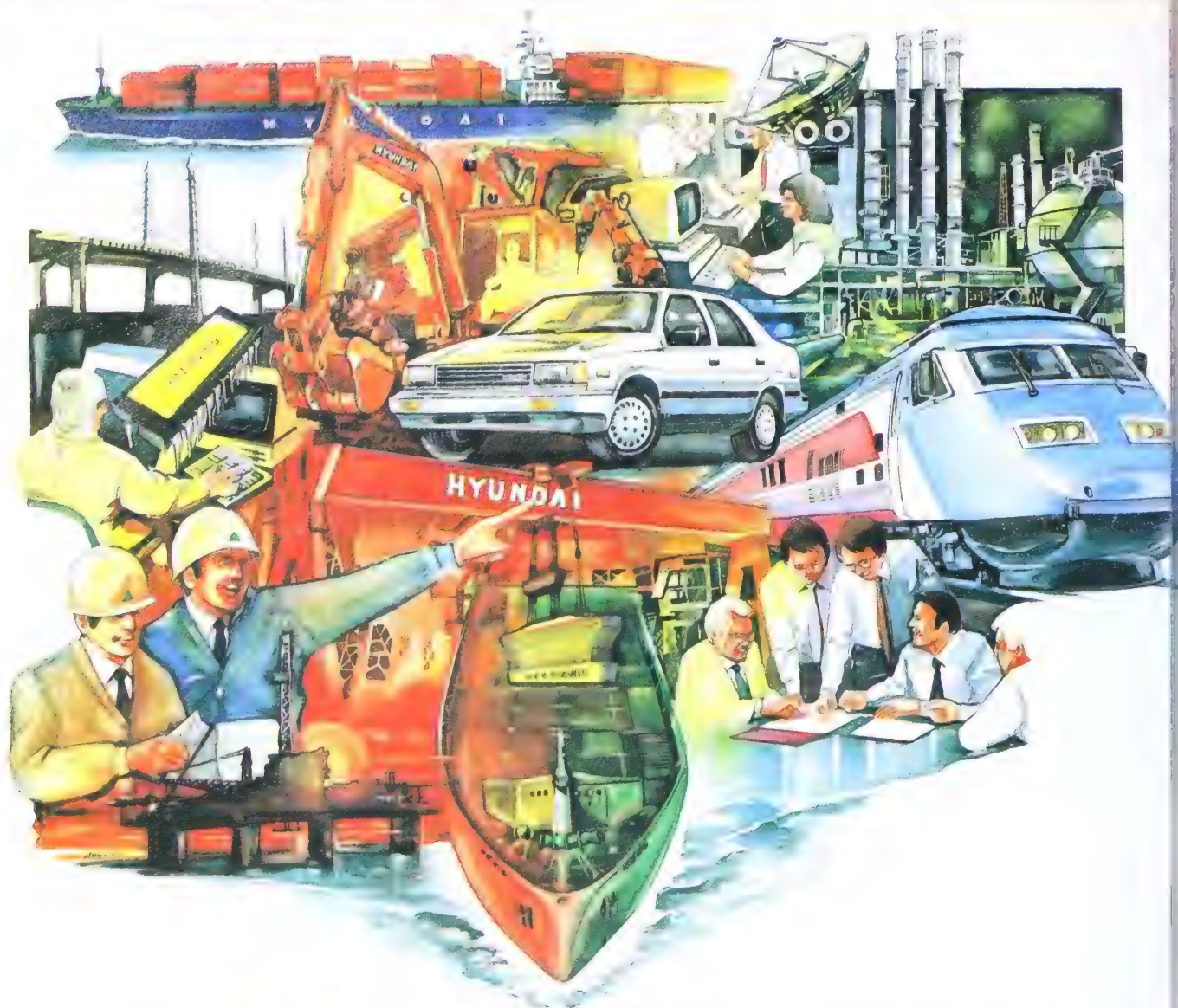
As the USA's Housing Partner, we will keep working with lenders, builders, real estate brokers, nonprofits and governments at all levels in the search for solutions to the problems of housing affordability.

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HUMANA REGAINS THAT HEALTHY GLOW

Linking its hospitals with its insurance plan starts to pay off

In 1984, David A. Jones, chief executive of Humana Inc., came up with what sounds like a quixotic plan to link hospitals with a health insurance company. Then the insurance customers could be funneled into Humana's hospitals. The problem is, insurers usually make money by keeping hospital stays short, something that often doesn't sit well with hospitals. When Humana underpriced its insurance plans, the strategy backfired. The division turned in five years of operating losses. But Jones stuck to his plan, and he's starting to make it work. With a new marketing strategy and higher premiums, Humana's Group Health Div. eked out its first operating profit in the quarter ended Feb. 28, and analysts say it could earn \$8 million this year. More important, Jones says the insurance unit is finally channeling more of its patients to Humana hospitals. His proof: Patients with Humana insurance accounted

for 15.5% of the company's total hospital admissions last quarter—up from only 9.3% last year.

That has helped Humana's prognosis considerably. Earnings plunged in 1986 and have gradually recovered. Stemming the red ink at the insurance unit should help push the company's fiscal 1989 earnings up 11%, to about \$253 million on revenues of \$4 billion. That's enough for Wall Street: Humana's shares fetch about 31—near a three-year high.

Jones's approach to health care has always been unconventional. The former attorney started a nursing home business in 1961. He bought a single hospital in 1968 and 10 years later acquired a

hospital company much larger than Humana. But when the federal government moved to clamp down on health care costs in 1983, hospital occupancy rates dropped. So Jones tried to turn Humana into a full-service medical company—with hospitals and a network of doctors' offices linked by insurance products. Partly to get publicity, he agreed to sponsor 100 controversial artificial heart implants.

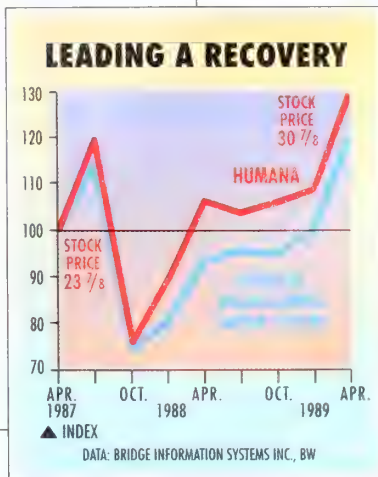
Jones reasoned that low premiums would entice businesses to buy Humana's group insurance for their employees' health plans. Then, to get policyholders to use Humana hospitals, the company imposed deductibles for treatment received elsewhere. Because Humana's hospitals are among the industry's most efficient, that would help keep insurance payments low. The clinics would result in hospital referrals.

But in its zeal to sign up new members, Humana underpriced its insurance plans. When medical costs soared, the company was locked into the money-losing contracts. Worse, some physicians were irked by Humana's penny-pinching policies and wouldn't steer patients to its hospitals. "We made every mistake possible in the first year," admits Wayne T. Smith, president of Group Health.

FLAT FEES. Humana has now raised its insurance rates by as much as 25%. And it is concentrating on selling Group Health in 17 markets where it has a strong hospital presence—half the cities tried in 1986. The company sold its doctors' office chain in 1987, the year of its last heart implant. "The basic idea remains the same," says Jones. "It all boils down to execution."

As the business evolved, Jones began to model Humana on the nonprofit health maintenance organization Kaiser Permanente, the nation's largest private HMO. Kaiser owns hospitals and charges its members a flat fee for medical care they require—but they must use Kaiser facilities and doctors. So far, though, no for-profit hospital management company has conquered the intricate insurance business, though plenty have tried.

But analysts say tough cost controls set Humana apart. For example, to cut down on unnecessary procedures, Humana requires doctors to answer a series of questions via computer before admitting patients to its hospitals. To squeeze labor



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*From Database Magazine

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costs, the company has a pool of traveling nurses who can be dispatched to different parts of the country as needed.

Humana has changed its focus to find doctors willing to accept its insurance customers as new patients. The company found well-established doctors a hard sell because they resented Humana's financial controls. So it began proselytizing young physicians who were eager for new patients—even if they did come with restrictive insurance coverage. Humana is also testing a plan in Denver that promises doctors a certain number of new patients if they sign up. Some doctors seem appeased by the company's efforts. "After a few uncertain years, Humana has begun to prove itself" to doctors, says Dr. Lee Halfman, who practices in Denver.

Although it has raised rates, Humana claims its Group Health plans are still competitive, and it has won contracts with such employers as General Electric

To squeeze labor costs, Humana dispatches nurses around the country as hospitals fill up or empty out.

Co. in Louisville and Florida's Broward County School Board. In fact, Group Health now has 900,000 members, up from 790,700 last August. To continue expanding, the company is counting on growth in its business of providing additional coverage for medicare patients.

DISCOUNT. There are stumbling blocks to Jones's plans. Such traditional insurance companies as Cigna Corp. and Travelers Corp., which operate HMOs, keep competition keen in health insurance. Moreover, because Humana charges Group Health patients a discounted price, its hospital operating margins have been shrinking—to 19% for the first six months of fiscal 1989, compared with 20% last year. Despite Group Health's referrals, the company's occupancy rates are only about 49%—slightly less than the average among for-profit hospitals.

Jones contends his strategy simply needs more time to work before occupancy rates jump. Eventually, higher revenues from an increasing stream of Group Health patients should make up for shrinking margins. That could also happen by the end of fiscal 1990, according to Seth H. Shaw, an analyst at Prudential-Bache Securities Inc. If so, Jones will have proved that synergy can sometimes happen in unlikely ways.

By Stephen Phillips in Louisville



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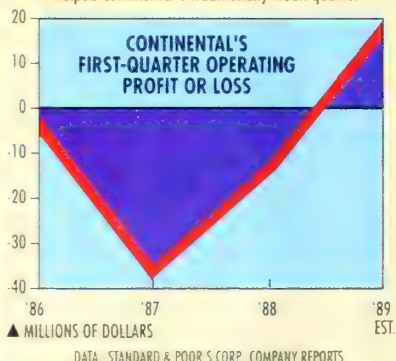
CEO Joseph Corr is cutting the carrier's chronic losses

For years, Continental Airlines Inc., the biggest division of Frank Lorenzo's Texas Air Corp. empire, steadily exceeded even the most pessimistic expectations. Losses, late arrivals, misplaced baggage—the figures always came in worse than anticipated at the \$4 billion carrier. Even last year, when most airlines recorded their biggest profits ever, Continental beat the odds and lost \$315 million.

Can those days be over? Under its new chief executive, D. Joseph Corr, the airline's first-quarter loss, on sales of \$1.2 billion, narrowed to \$16.5 million from an \$81 million deficit a year ago. Yield, an essential measure of an airline's ability to generate sales from passenger traffic, is up 18% from last De-

CAUSE FOR HOPE?

Higher fares, better cost control, and the Eastern strike helped Continental's traditionally weak quarter



cember. Analysts estimate Continental made a slight operating profit, and they are cautiously optimistic that the airline can make a little money in 1989. "If it isn't a fluke, then Continental could make substantial progress before the end of the year," says Raymond Neidl, an airline bond analyst at the investment firm McCarthy, Crisanti & Maffei Inc.

WEAK SISTER. What worries Wall Street, of course, is that instead of being on the mend for good, Continental may be merely enjoying, temporarily, the industry's robust health. Corr has also benefited from the woes of Eastern Air Lines Inc., Continental's sister carrier at Texas Air. The strike and bankruptcy at Eastern have idled 6% of the industry's capacity, and Continental, like others, has elbowed in on Eastern's territory, starting up new routes to Miami and the Caribbean. One well-placed insider says Continental is picking up as much as \$20 million a month in revenue from the strike. "Eastern has been an absolute bonanza [for Continental]," says the insider.

Corr maintains that any gains Continental has made at Eastern's expense have been wiped out by Eastern's

NORTHWEST

IN THE KOREAN BUSINESS COMMUNITY CLOTHES DON'T MAKE THE MAN, TITLES DO.

Age, status and experience are what count in Seoul. A bright, young executive is not impressive. In fact, if you are setting up the very first meeting between two companies, try to make sure at least one of the people representing you is over 50 or quite highly ranked.

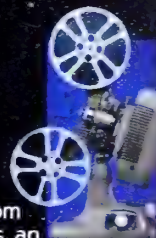
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ions, which have picketed Continental facilities and scared passengers away. Continental's progress, says, comes from more fundamental changes.

Corr, 48, knows something about overhauling troubled companies. A hulking man, fond of blunt talk and salty language, he does not get results through charisma. Instead he ferrets out waste and pushes his managers to save money. Says Corr: "I am always looking for efficiency."

Corr got his start in heavy manufacturing. Later, as vice-chairman of ACF Industries Inc., a boxer manufacturer bought by Carl Icahn, he cut costs enough to push the languishing business back into profitability. When Icahn bought TWA in 1986, Corr moved over to the troubled carrier, where he again cut costs and boosted operating profits.

Last December, Corr abruptly left TWA amid rumors of a falling-out with Icahn. Weeks later, he popped up at Continental as the airline's new chief executive, answering only to Lorenzo and then giving orders to Continental's president, Martin R. Shugrue Jr. Shugrue soon resigned, and Corr started a



**CORR: "I AM ALWAYS
LOOKING FOR EFFICIENCY"**

shakeup. Touring operations and meeting executives and personnel, Corr got right to the point. Says one pilot who works closely with management: "Corr would ask, 'What do you do, and what's your justification for staying here?'"

The answers seem to have triggered several major changes. After spotting

some huge bills for aircraft maintenance, Corr told his operations managers to trim those costs fast. Now, many maintenance chores handled by outside companies have been brought back in-house.

PILOT GOODWILL. In a series of intense budget sessions, Corr cut flights from hub operations in Newark, Cleveland, and especially Denver, where Continental had been waging a ruinous war for market share with United. He then added extra service to destinations where demand was higher, such as Santo Domingo, Bermuda, and Tokyo. The changes cut the capacity of Continental's fleet by 7%, while revenues rose 11%.

One benefit of the rescheduling has been to ease the workload for the pilots, whose goodwill is essential to Corr's success and who had been griping about the hours of flight time they had to put in. Corr

has further endeared himself to the most senior pilots by boosting their wages some 40%. When pressed, Corr admits that he wants to order planes soon, a sign that he eventually wants to expand Continental, which would provide junior pilots a chance to advance.

Corr has benefited as well from

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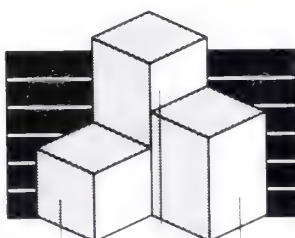
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Stocks Long-Term Bonds Money Market Instruments

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changes initiated by Shugrue and others. A new software system, ordered before Shugrue quit and in place since February, is helping Corr manipulate changes so that more travelers end up paying higher prices. Corr so far has slashed the fares that Continental booked last December, although he has been offering special deals to members of Continental's frequent-flier plan, as well as to American Express card holders.

Continental's rate of on-time flights has also improved dramatically, a draw for business travelers. Last year Shugrue revamped the system of incentive payments to encourage pilots to make up for lost time, even at the expense of extra fuel. As a result, in March, Continental had the third-best on-time schedule among 13 carriers ranked, up from sixth place in February. Says Patrick O'Shea, CEO of Associated Travel Network Inc. in Chicago: "They've demon-

Corr has endeared himself to the most senior pilots by boosting their wages by some 40%

strated they can handle business travel.

Despite all the progress, it's much too early to credit Corr with another turnaround. Continental hasn't made money in two quarters in a row since 1986. Labor and other costs at the carrier, which have increased 11% each year in the last two years, will continue to pressure margins. And with \$2.4 billion in long-term debt, Continental shells out \$300 million in interest annually. Corr also has to be careful that by sticking to higher fares he does not scare away too many travelers: Continental's traffic was off 12% in April from the year before.

LIABILITIES. Perhaps more ominous is the plight of Texas Air, which has lent and advanced \$250 million to Continental over the past few years. But Texas Air, which has about \$300 million in cash and \$874 million in debt and redeemable preferred stock, faces potentially costly liabilities in the Eastern bankruptcy, and it can ill afford to bail Continental if it should it founder in a recession.

Corr's response to these risks is simple: When a company has problems, you fix them. Otherwise, he says, "you don't survive." There's no doubting Corr's credentials as Mr. Fix-it. But even he needs a lot more time and luck if he is to make permanent repairs at one of the most troubled airlines in the industry.

By Todd Vogel in Houston

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EVEN FOR A GO-GO BANKER, THERE ARE CERTAIN NO-NOs

Regulatory realities catch up with CenTrust's David Paul and his flamboyant ways

Give David L. Paul credit for his persistence and ingenuity. For instance, there was the morning in 1985 when the chairman and CEO of Miami's CenTrust Savings Bank met with Lewis S. Ranieri, then the guru of mortgage-backed securities at Salomon Brothers Inc. He learned that Ranieri planned to have lunch with a tycoon. Paul asked to join them. Ranieri declined. So Paul donned a waiter's vest and slipped into their private dining room at Salomon's headquarters. He delivered a Perrier with a twist of lime, Ranieri's favorite drink, and sat down at the table. Recalls Ranieri with a laugh: "He'd made his point."

That mix of chutzpah and guile is a Paul trademark. He's the go-getter who took charge of a moribund Miami-based thrift in 1983 with no money down, pledging little more as a guarantee than his then-unfinished yacht. Under Paul, CenTrust has more than quadrupled its assets to \$10 billion. He has made it the biggest thrift in the Southeast and 20th-largest in the nation.

CAPITAL CRUNCH. While Paul is arguably CenTrust's biggest asset, he may also be its biggest liability. He is alternately combative and conciliatory toward regulators, and his opulent lifestyle raises red flags. Critics charge that the thrift takes too many risks with its fast-growth strategy and heavy reliance on mortgage-backed securities, junk bonds, and, yes, even Old Masters. Regulators have ordered Paul to liquidate CenTrust's \$28 million art collection—most of which is exhibited in his home. The collection includes a Rubens that cost \$12 million. Some experts have valued it at much less, though Paul defends the purchase price.

CenTrust—which lost \$5.4 million in the Mar. 31 quarter and nearly \$20 million in the last nine months—has been forced to change its ways as a result of regulatory directives and what Paul concedes is a more conservative economic and political climate. But clearly this is no Texas-sized thrift disaster, and Florida and federal regulators are trying to make sure it doesn't become one. Under

their pressure, the state-chartered thrift is scaling down its \$1 billion portfolio of junk bonds, and over the next two years it will establish a 3% loss reserve. It has agreed to notify regulators before declaring dividends on the common stock of which Paul owns 51%. To increase outside influence on CenTrust's board, Vice-Chairman Alfred Teti is relinquishing his directorship.

Still ahead for CenTrust and hundreds of other thrifts is the challenge of meeting tougher capital standards pending in Congress. They could require a tangible net worth of 3% of assets, depending on how that capital is measured, thrift analysts say. CenTrust would be thinly capitalized, or at worst, insolvent. Given its condition and its size, raising new capital would be tough: The stock, at 4¢, is down 71% from its 1986 high. "It's a locomotive headed for a brick wall," says Stephen Skaggs, vice-president of Securities Information Services, which follows thrifts.

Like him or not, David Paul is CenTrust—from the ideator who bathed CenTrust Tower in lights, which created an indelible fixture on Miami's skyline, to using his initials, DLP, as the ticker symbol. In keeping with his high profile in local society, Paul hosted a dinner for 60 in December that was prepared by six French chefs flown to Miami for the occasion after he bid a reported \$30,000 for their services at a charity auction.

NO WIMPS. Paul, 49, has made the papers in other ways as well. In addition to his law degree from Columbia University, he has boasted of a graduate degree from Harvard. Numerous publications, including *BUSINESS WEEK*, took him at face value. But the *Miami Review*, a legal news-

PAUL GOT CENTRUST
THROUGH TIMING,
LUCK, AND LEVERAGE



has since reported Paul's admission that he never graduated from Harvard.

Former executives and associates say that he solicits advice doesn't heed it and that he can't delegate well. "I am a strong personality, and people like or don't like me," Paul admits. He contends that other Centrust executives are outspoken, "This institution is not made of wimpy people."

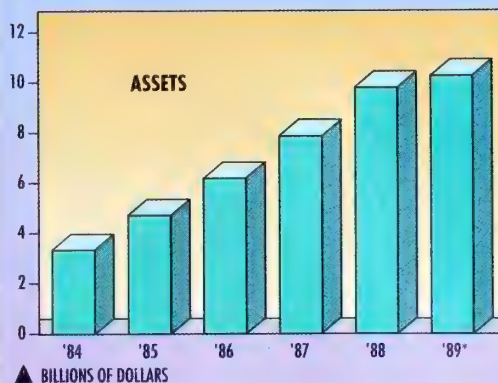
Even some of his harshest critics concede that Paul took over an ailing thrift without federal help—so far—has kept it alive. Friends and foes alike cite his prodigious capacity for work, frenetic energy, and brilliant intellect. He's a typical entrepreneur," says a regulator. "I'm just not sure he belongs in a regulated industry."

How Paul got there was a matter of timing, luck, and leverage. In 1981, when he was a developer in Connecticut, he borrowed \$12 million to buy control of an ailing real estate investment trust, Westport Corp. Through a friend who sat on its boards, he heard of the plight of Miami's Dade Savings & Loan Association, which, like many thrifts, was shaken by sky-high interest rates and dubious real estate loans. In October, 1982, Paul applied for a \$2.3 billion asset thrift, planning to buy Westport stock worth about \$1.7 million.

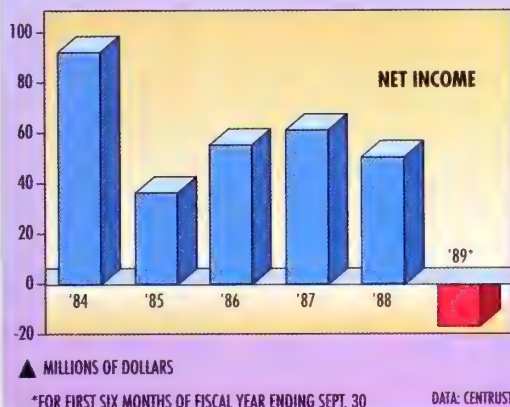
Regulators took more than a year reviewing the offer. They reduced appraisals of some Westport properties and questioned the health of a Chicago condo project. As a clincher, Paul pledged \$7.2 million worth of assets of newly formed David Paul Properties Inc. In addition to some mortgages transferred by Westport, its primary asset was the Grand Cru, his 94-foot yacht under construction. As part of the deal, regulators said that the assets of Westport—since renamed CenTrust—had to equal at least \$32 million by 1989. If not, David Paul Properties would have to make up the difference. No problem, says Paul, who claims that the net worth of CenTrust is now over \$60 million.

INK DEBTS. But in late 1983, one month after the deal closed, Westport revised its financial statements to boost the assets on the condo project from \$600,000 to \$4.6 million. In 1984, Chemical Bank reclosed on the condo loan. Paul sued Chemical, claiming it had sabotaged the project, which Chemical denied. Chemical won the foreclosure in 1987. Paul's lawsuit is still pending. Now Chemical is pursuing Paul's \$5 million personal guarantee, with the trial ex-

CENTRUST HAS EXPANDED MIGHTILY...



...BUT PROFITABILITY HAS COLLAPSED



*FOR FIRST SIX MONTHS OF FISCAL YEAR ENDING SEPT. 30

DATA: CENTRUST

pected to begin shortly in Chicago.

Meanwhile, in taking charge at CenTrust, Paul sacked all but one top executive, installed additional controls, and revamped computer systems. He also had to tackle the takeover's albatross: \$526 million of the accounting asset known as "goodwill." This asset must be amortized over 25 years, confronting CenTrust with an annual \$21 million after-tax bite on net income.

Paul's solution was simple: more assets. That would reduce goodwill as a percentage of assets and enable the thrift to build capital through retained earnings and public offerings. Unable to gather enough deposits from branch offices, CenTrust bid aggressively through brokers. With help and encouragement from Wall Streeters such as Ranieri, CenTrust plunged into exotic trading strategies involving mortgage-backed securities. The thrift became a member of Drexel Burnham Lambert Inc.'s junk-

As a member of Drexel's junk-bond network, CenTrust had as much as 12% of its assets in high-yield bonds

bond network and had as much as 12% of its assets in high-yield bonds. That angered state regulators so much that the legislature passed a law barring state-chartered thrifts from owning bonds that were below investment grade. Paul took to buying unrated and private placement junk debt.

Over the years, critics have charged that CenTrust's profits result from trading. It recognized gains on profitable positions while classifying losers as "investments." Why the semantics? Outsiders say it's because under accounting rules for thrifts, trading securities must be marked to their market value, while investment securities needn't be. They say if CenTrust's mortgage-backed securities were marked down to current prices, the losses would be staggering. This Paul admits, but he argues that in principle they should be offset by the higher value of low-rate older deposits.

Trading profits aside, CenTrust is losing money on its core banking business. Celia Vlasin, an analyst with Johnston Lemon & Co., puts the losses at a \$72 million annual rate. Paul says they are only half that and that analysts are ignoring fee income and other revenues.

GILT AND GAZEBO. "I don't think we've ever gotten a fair shake," says Paul, citing a litany of successes. New loans were \$1.9 billion in the fiscal year ended last Sept. 30, up from \$77 million in 1983. Branches have grown to 60 from 32, and the net interest margin is up.

Paul's compensation has been modest—\$2.4 million over five years. He has also collected \$11 million in dividends. CenTrust holds \$3 million in mortgages for Paul, who bought the houses on both sides of his LaGorce Island mansion, leveling one for a garden and gazebo.

His taste for luxury and quality extends to CenTrust's offices. The \$95 million CenTrust Tower was built under the former management, but Paul's influence in the interior decor is unmistakable. CenTrust's quarters, which cost \$25 million to complete, boast Taiwanese and Italian marble floors and walls, a gold-leaf ceiling in the reception anteroom, and white gold above a stairway in the executive suite. Paul says the Old Master paintings were intended to grace the offices, but he kept them at home for safekeeping from humidity until construction was done. He now concedes that the art purchases were unwise and wishes the fuss would die down. But given his penchant for attracting controversy, something else would be sure to pop up in its place.

By Gail DeGeorge in Miami

EUROPE'S SMART MONEY HEADS BACK TO WALL STREET

Investors see a 'window of opportunity' to buy U.S. stocks

Don't tell Walter Temperli that the U.S. is headed for a fall. The senior investment strategist at Zurich's Bank J. Vontobel & Co., Temperli has turned unabashedly bullish on Wall Street. For the first time in at least two years, he says, "a window of opportunity" to buy American stocks has suddenly appeared.

Temperli is not alone. Europe's smart money is moving into Wall Street for the first time since the 1987 crash. In fact, says Diana Plants, senior executive with London's Bernstein/James Capel, "foreigners are more optimistic about the U. S. than Americans."

The cash is flowing in across the board. Conservative Europeans are piling into such big-name stocks as Boeing, Du Pont, General Electric, and J. P. Morgan. But many are also going for smaller issues. For example, Alan Kemp, investment manager at Edinburgh-based Dunedin Fund Managers, likes Cash America Investments, a Southwestern pawnshop chain, and Arctic Alaska Fisheries (page 100), a big seafood exporter to Japan. Temperli is buying PNC Financial, the Pittsburgh-based bank group.

Why the sudden interest? The Europeans say they don't want to miss the next

market boom, which they see as inevitable. Many argue that the long-awaited U.S. slowdown finally is here and that interest rates soon will drop. They think the slowdown will be gradual, so profits wouldn't get hurt much. And with the dollar stable and inflation fears easing a bit, they don't have many worries about being wiped out by another currency devaluation. "The dollar has become respectable again," says Heinrich Looser,

SOME COMPANIES THE EUROPEANS LIKE

Stock	Recent price	Price-earnings ratio
ALCOA	62 1/4	5.7
ARCTIC ALASKA	8 5/8	8.7
BOEING	75 5/8	17.9
CASH AMERICA	14 1/4	20.9
DOW CHEMICAL	91 3/4	6.4
FLEET/NORSTAR	28 1/4	8.8
GENUINE PARTS	39 1/4	16.2
MARTIN MARIETTA	43 1/2	6.1
J.P. MORGAN	36 1/8	7.4
WASTE MANAGEMENT	46 5/8	21.7

DATA: BRIDGE INFORMATION SYSTEMS INC., BW

research chief at Bank Julius Baer and Temperli think the Dow Jones Industrials could advance about 10% to 2,600, by summer.

European cash is also moving into the U.S. because other markets look overcast. West German Chancellor Helmut Kohl's falling popularity and a sagging economy are roiling Frankfurt. Double-digit interest rates and a nagging trade deficit have London on edge. And political paralysis following Japanese Prime Minister Noboru Takeshita's resignation is cooling European interest in Tokyo.

DELICATE BALANCE. In returning to Wall Street, many Europeans are focusing on companies headed for restructuring. Julius Baer's Looser, for instance, is bullish on Du Pont's prospects under new Chairman Edgar S. Woolard Jr. Du Pont climbed to \$125 a share, from about \$80 now, Looser says, if Woolard can get through with his plans to shake out underperforming divisions. With environmental concerns on the rise, Looser also favors Waste Management. Even with cuts in defense spending, Vontobel's Temperli likes Martin Marietta.

Despite their newfound optimism, Europeans still fret over the effects of the U.S. budget and trade deficits. But they think that in the short run, at least, the U.S. economy is achieving a delicate balance, slowing just enough to cool inflation without risking a severe shock. As Union Bank of Switzerland's President Jörg Ruprecht puts it, "Suddenly, there is blue in the sky." When the blue turns to gold is another question. Right now, some of Europe's smartest investors think that the U.S. is the best bet around.

By Blanca Riemer in Frankfurt

INVESTIGATIONS

THE CFTC DROPS ITS KID GLOVES

But critics say the commodities regulator could be a lot tougher

By recent standards, it was a low-key raid. On May 4, when the Commodity Futures Trading Commission served subpoenas at four New York commodity exchanges, comparisons with the FBI's Chicago sting were inevitable. In January, traders say, the feds came to their homes at night, trying to force them to cooperate. In New York, CFTC officials merely asked the exchanges to call dozens of members off the floor to serve them subpoenas.

While no one questions the CFTC's ci-

vility, the same can't be said for its timing. Critics say the agency, which had been under attack for its laxity in policing the trading pits, is playing politics. The CFTC is getting ready for a grilling by Congress, starting with a May 17 reauthorization hearing. "The CFTC did a nice curtain-raiser," says a Capitol Hill staffer. CFTC Chairman Wendy L. Gramm helped by phoning key representatives to inform them of the agency's actions.

UNDERCOVER? The CFTC wants information about a variety of alleged trading violations, with two big traders apparently the targets: Preston H. Semel and Mark B. Fisher, head of MBF Clearing Corp. But the investigation poses questions about the agency's authority to oversee trading. The CFTC has no direct jurisdiction

over floor brokers, and traders who break the rules seem to stay in business.

Sergio Cardello, a partner of Semel without admitting fault, settled charges brought by the New York Commodity Exchange in 1985 by paying \$125,000 and forfeiting his membership, worth about \$70,000. Yet Cardello now had to stop trading on the New York Mercantile Exchange and is still a member. The three traders declined comment.

Some want to give the CFTC more power. Representative Glenn English (D-Okla.) would even let it use undercover agents. But whether it's done covertly or overtly, the arm of the agency will be reaching into the pits for some time to come.

By David Zigas in New York, with Tim Smart in Washington

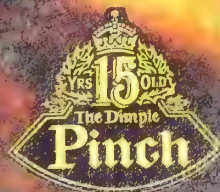


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REACH OUT AND TOUCH THE MARKET'S LATEST FAD

It's 'dial-a-stock,' and a former broker is paving the way

"Johnson Controls. J-C-I. Neuberger Berman were the buyers on Friday. I bought 3,000 shares; I should have bought more. I liked the tape action—I think it's a deal. I think you should be long Johnson Controls."

That's a snippet of what callers hear when they phone a 900 hot line called Traders & Investors Alert. For \$1.95 a minute, the "Morning Whisper Update" delivers tips on at least a dozen stocks. Rapid-fire and rich in trader's lingo, it beats dial-a-porn for Wall Streeters. No tedious talk here about fundamentals, just what's hot to buy in the next few hours—in hopes of turning a fast profit in the next few days.

Like other 900 services from romance

to rap music, the update evidently fills a need for instant gratification: Most callers are Wall Street brokers looking for stocks to peddle. The response suggests that this may be just one of the first of Wall Street's 900 numbers. Launched in December, the service has no independently verified track record. But it does benefit from the hefty telemarketing efforts of some 30 employees, most of whom drum up subscribers for an array of premium services.

The key man is Barry K. Davis, 45, whose first career in the securities business ended abruptly in 1971, when his small over-the-counter brokerage firm had heavy losses. While the firm was being investigated for operating with insufficient capital, "the National Associa-

tion of Securities Dealers told me not to open any new accounts. I gave a speech at Wharton, and afterward, 22 people gave me checks. I broke the rule and took the money," says Davis. Ultimately, regulators closed the firm and took away his broker's license. Still without one after 18 years, he isn't allowed to give customers one-on-one advice.

INSTINCTS. It's Davis on the hot line though. The fast talker sits at the center of a cramped two-room office, staring at a computer terminal, fielding calls, and trading for himself. Clean-cut young salesmen are positioned around him, and a wall chart shows the revenue that each has brought in.

Davis relies on his instincts and contacts. And he sees no conflict in buying stocks he plugs, as long as he discloses this on the hot line.

One winning pick was Syntex Corp., a drug company that Davis began to promote three months ago. Curiously, Syntex started rising even though several brokerage firms advised investors to sell. A friendly floor trader on the New York Stock Exchange told Davis that the brokerage firm known to represent foreign buyers was accumulating the stock. Davis speculated that a Swiss drugma-

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S (CENTER, FOREGROUND): HE SAYS HE OFFERS BETTER INFORMATION THAN BROKERS' OWN FIRMS

as planning to bid. So far, no bidder materialized—but the stock has risen from 38 to 46.

Davis' real feat has been as a salesman. He motivates his employees by promising that they will soon share ownership in the company. But the real proof of his ability is that his firm is

selling to salesmen: Most of his subscribers are brokers. Davis' pitch is that he delivers better information than they can get from their own firms. Says Davis: "We try to give our customers the same chances as the institutions."

To get things rolling, Traders & Investors Alert cold-calls brokers and offers

them a free trial on the hot line. The firm gets 720 paying calls a day, but the big money comes from the 1,100 subscribers that pay at least \$445 a year for an access code that gives them unlimited calls. "Platinum" subscribers pay \$1,450 and get a beeper. And for \$10,000 a year, subscribers will get personal access to Davis—as soon as he registers as an investment adviser, which he says is in the works. Davis, who talks about selling part of his stake in the firm, estimates its 1989 revenues at \$3 million.

Many investment newsletters offer hot-line services, though not usually on a per-call basis. But a handful of newsletter publishers have launched 900 numbers in the past month, including Harmonic Research in New York and Stockmarket Cycles in Los Angeles. More are in the works. Talisman

Communications Corp., a New York firm, is testing a 900 number that will offer market commentary, stock quotes, and celebrity interviews. The scramble is on for a fertile new market. But the real issue is whether individual investors will share in the dial-a-stock profits.

By Leah J. Nathans in Fort Lee, N.J.

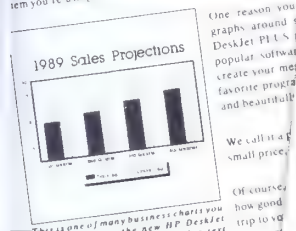
But they keep looking at the evidence.

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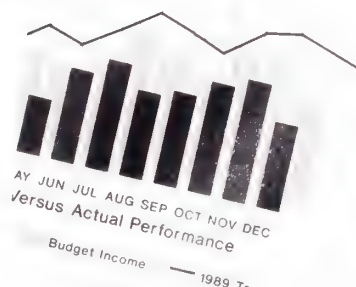
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INVESTMENT BANKING

DOES THE PLANT-CLOSING LAW APPLY TO BROKERAGES?

If it does, the new rule could cost Wall Street firms a bundle

When L.F. Rothschild & Co. suddenly fired some 200 workers in March, the move seemed to make sense. After all, the securities firm had suffered big losses following the 1987 crash and was subsequently acquired by Franklin Savings Assn. With the layoffs, the beleaguered brokerage was simply cutting costs the old-fashioned way. But the old-fashioned way on Wall Street may be no more. Some former Rothschild employees filed a class action on Apr. 21, alleging their dismissal violated the new federal plant-closing law because they did not receive the required 60 days' notice.

The suit against Rothschild is the first legal test against Wall Street of the Worker Adjustment & Retraining Notification Act (WARN), which took effect on Feb. 4. But it probably won't be the last time that a brokerage will have to grapple with WARN. According to the Securities Industry Assn., as many as 3,000 workers have been laid off on the Street since Dec. 4, when some lawyers argue the law really took effect, or 60 days before the February date. Potentially, WARN could cost firms \$15 million in back pay and fines of \$45 million.

Philadelphia attorney Richard D. Greenfield says he "has been contacted by" ex-employees from Drexel Burnham Lambert and Thomson McKinnon Securities as well as L.F. Rothschild. "We want to take this law as far as it will go," says Greenfield.

'ADEQUATE NOTICE.' A worried Wall Street is already gearing up to protect itself from lawsuits: Shearson Lehman Hutton Inc. has distributed guidelines on the new law, and a Merrill Lynch & Co. insider says his firm will soon do the same. He notes, "when we recently

closed a regional operating center outside of Detroit, we made sure to give adequate notice." Maurice H. Goetz, outside Drexel counsel, says Drexel will "comply" with WARN, "even at great cost." He adds that 60 days' notice poses "very serious" morale problems.

It's not the little firms that will be hurt by WARN. The law only covers private-sector employers with more than

GREENFIELD: "WE WANT TO TAKE THIS LAW AS FAR AS IT WILL GO"



100 workers. They must give 60 days' notice before a "massive layoff" or "plant-closing" of more than 50 people, or be liable for back pay and benefits for each day notice was required—plus day penalties of up to \$500 per worker. The law applies to all employees. The Rothschild suit even includes brokers who were making \$1 million a year.

In the long run, the law may change the way Wall Street has traditionally dealt with its employees. One pattern has been to overstaff quickly during bull markets and lay off in slack periods. But now, Wall Street is looking over its shoulder worrying just how much its recent binge of layoffs will cost.

By Michele Galen, with Jon Friedman in New York

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BY GENE G. MARCIAL

HAS THIS OUTFIT FOUND 'A MIRACLE FOR OIL SPILLS'?

As a corporate matchmaker who finds buyers for companies on the block or divisions being spun off, Jerome Siebert gets to know his clients—and his quarry—inside-out. Siebert's research focuses mainly on small, emerging growth companies, and his deals are usually big winners.

"The business is like a puzzle board—you find the best corporate fits, and many times you stumble on great undiscovered investment ideas, too," says Siebert. His current favorites: Yankee Cos., which has restructured to focus operations on the environmental-cleanup business, and RPM, a maker of chemicals for waterproofing and corrosion control.

Siebert, president of merger broker Siebert Associates, says a giant oil company operating on Alaska's North Slope is about to sign a multimillion-dollar contract with Yankee for the use of a chemical mixture called Formula 70 that could be a "miracle product for oil spills." Chairman and CEO Paul Montle says Formula 70 acts as a neutralizing agent that prevents oil from adhering to sandstones or gravel. And Yankee recently acquired another Siebert find, Toxic Clean Up Systems, a tiny California maker of a formula that encapsulates oil, thereby solidifying it. **'ENORMOUS POTENTIAL.'** "These two products will greatly boost our environmental-cleanup revenues," says Yankee President Francis John. The company has tested the chemicals at oil spills, he says, including Exxon's in Valdez, Alaska, and they have been found effective. The chemicals also have other commercial uses, says John, especially for cleaning carpets.

Yankee's stock, which is listed on the American Stock Exchange, peaked at 8 in 1987 but tumbled thereafter because of losses from the company's banking and oil-and-gas operations. It's out of those troubled businesses now, but the stock still trades just below 2.

Siebert discovered RPM 10 years ago, when its stock was selling at \$8 a share. After several splits, it climbed as high as 18 last year. It's now at 16, and Siebert thinks the stock is still a superb buy.

Under Chairman Tom Sullivan, RPM has compiled an impressive record of



SIEBERT: "THE BUSINESS IS LIKE A PUZZLE... YOU STUMBLE ON GREAT IDEAS"

41 consecutive years of increased earnings and revenues. Over the past 10 years, sales grew at a compounded annual rate of 16%, while net profit rose at a 19% pace. Analysts see another record year in 1990, when earnings are expected to rise to \$1.30 a share from an estimated \$1.05 in 1989.

About half of RPM's growth has been through acquisitions, six of which were Siebert deals. But one big investor says that RPM itself may become the target of a giant chemical company. "RPM's growth record has attracted some industry biggies," he says. Based on assets, cash flow, and proven capacity to boost earnings, Siebert feels the stock is worth at least 25.

A BUYOUT MAY EASE NASHUA'S BAD NEWS

By almost all measures, the stock of Nashua should be falling. Analysts are down on the company, and Nashua itself forecasts that earnings in the first half will be below 1988's for the period. Plus, Nashua is laying off workers because of weak demand for its computer products and photographic-finishing services.

So why is Nashua's stock, now at 37, trading near its high? Takeover talk, of course. Nashua has been rumored as a target before, in 1988, which caused the stock to climb as high as 42. But this time, it's a sure bet that an inves-

tor group will soon make a 13D filing to report a stake of more than 5%.

This group is led by John Bendall Jr., a partner at New York's Heritage Capital. Bendall is not associated with Tigera Group in Belmont, Cal., or Canada's Kingsbridge Capital, which have announced a combined stake in Nashua of just under 5%.

Bendall, who declined comment, is known to have active alliances with affluent raiders who are interested in Nashua. A source says the Bendall group may make an initial offer in around \$41 a share. Some analysts believe Nashua's breakup value to be much more, however.

One takeover pro figures it this way: after deducting debt of \$51 million: office systems unit, \$330 million; coat products, \$75 million; computer products, \$145 million; and photo finishing, \$98 million. Total: \$648 million, or \$66 a share based on 9.5 million shares.

THE BEST LI'L PAPER STOCK IN TEXAS?

Temple-Inland has nothing to do with religion. It's a Texas-based paper and forest-products company. But unlike a host of other paper companies—which have been rumored to be takeover targets—hardly a whisper is heard about Temple-Inland. Even so, some pros have been snapping up shares as if it were a buyout candidate. Their explanation: Temple-Inland, now trading at 53, may be the most undervalued paper stock on the Big Board.

Kazi Hasan, director of investments at New York securities firm J.P. Lowe, thinks that Temple-Inland is worth \$100 a share based on the breakup value of its paper, lumber, timberland, and financial-services operations. The company, which was spun off from Time in late 1983, has 1.8 million acres of timberland in Alabama, Georgia, Louisiana, and Texas.

Over the past five years, net income has jumped 315% and dividends have increased 110%. But while management has done what Hasan calls a superb job, Temple-Inland's stock has failed to reflect the company's rapid growth.

There is word that some big investors in Texas who are close to T. Boone Pickens Jr. and the Bass brothers are looking at the company. And Hasan argues that a takeover of Temple-Inland at \$100 a share, or about \$2 billion, could easily be financed from operating cash flow, estimated at \$100 million, or \$389 million.

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—John C. Jay
Creative Director, Bloomingdale's

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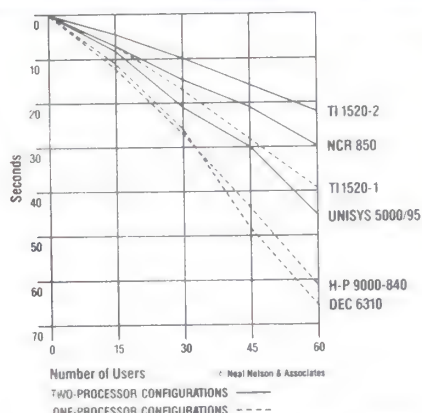
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Shown here are results from test #1 of Neal Nelson's Business Benchmark, used primarily to simulate a "normal" business environment.

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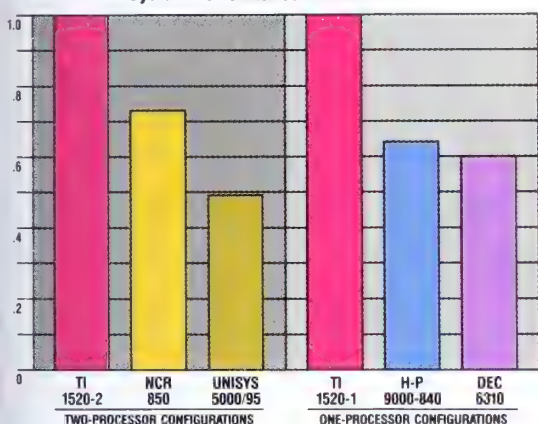
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TEXAS INSTRUMENTS



THESE GEE-WHIZ MACHINES ARE FINDING AN AUDIENCE

More companies put massively parallel computers to work

These are the trailblazers. Researchers at United Technologies Corp. have installed a radical new supercomputer that contains 16,000 separate processors to design helicopter blades for their Sikorsky Aircraft Div. The computer can sift quantities of data and tackle complex aerodynamics with the speed of a Cray supercomputer—at about one-fifth the cost. “We’ll be able to define optimum designs quicker than ever before—and cheaply,” says Robert E. Olson, manager of aeromechanics and thermal sciences at the company’s East Hartford (Conn.) facility.

Meanwhile, scientists at Perkin-Elmer Corp. are in the midst of an ambitious effort to teach these computers to recognize objects, especially for satellite-spying applications. “This requires state-of-the-art engineering analysis that we can do with no other [kind of] machine,”

says Edward P. McMahon, president of MRJ Inc., a Perkin-Elmer subsidiary in Oakton, Va.

These companies and dozens of others are taking a chance on a technology called massively parallel supercomputers. Containing 100 to 65,000 small processors, these machines can divide a problem into pieces handled by each processor and then attack the problem from numerous angles. While massively parallel machines have been around for five years, they’ve been largely ignored because their unique architecture makes them hard to program.

That’s changing. Customers are finding them flexible enough and fast enough to tackle intractable problems such as developing intelligent computers, finding trends in billions of minute pieces of data, and rapidly drawing 3-D graphics from geographical and physical

information. Led by market pacesetter Thinking Machines and its competitors, Intel Scientific Computers and Acce Memory Technology, the industry expects to increase its revenues by 25% a year by 1993, to \$180 million, according to Dataquest Inc.

Massively parallel machines solve what’s known as the von Neumann bottleneck. Most computers on the market today are designed for a central processor, a concept developed in 1946 by mathematician John von Neumann. The processor receives data and instructions from the computer’s main memory and solves problems one at a time. Small delays are frequent as the processor waits for information to get to it across a congested electronic pike.

In contrast, a massively parallel machine has hundreds of open lanes leading to its processors. Says Stephen Squires, a director at the Defense Advanced Research Projects Agency (DARPA), a key supercomputer backer: “These machines may eventually replace current approaches to computing.”

BRAINCHILD. If they do, Thinking Machines will be a big beneficiary. Founded in 1983 by Danny Hillis, the Cambridge (Mass.) company was one of dozens of corporations and universities that shared nearly \$600 million in DARPA funds earmarked for parallel-processing computers. TM used its \$5 million from DARPA and \$41 million in venture capital to build the Connection Machine, Hillis’ brainchild when he was a student at Massachusetts Institute of Technology. It has 65,096 processors, each a fraction of the size of the microprocessors that power personal computers.

Most of the other DARPA parallel projects, including Columbia University’s highly touted Non-Von computer, have failed, mainly because they couldn’t generate enough interest from the investment community. But Thinking Machines has prospered: Its sales jumped 50% last year, to \$31 million, and the company recorded its first modest profit in the fourth quarter.

TM has succeeded primarily by luring business customers. In the past year, it has hired 100 staffers to sell and support its machines. And it recently signed an agreement for Digital Equipment Corp. to market Connection Machines. Mobil Oil, Boeing Aerospace, and Perkin-Elmer are among TM’s customers.

Still, some of its recent sales came at a hefty cost. When Dow Jones News Retrieval Service purchased two Connection Machines last year to develop an online service that understands conversational commands, six engineers were dispatched to Dow Jones to help set



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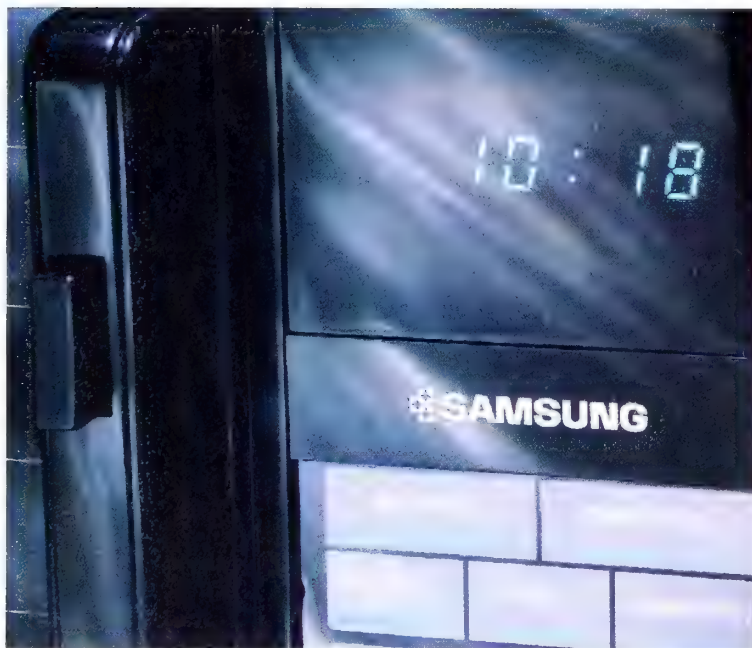


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up. They stayed for nearly a year. "I turned away some other customers because we didn't have enough people," says TM President Sheryl Handler.

Dow Jones required so much support partly because the Connection Machine runs the arcane programming language LISP, which few software writers are fluent in. "The language problem is the biggest barrier to the machine's acceptance," concedes Hillis. So Thinking Machines is testing a way to program the Connection Machine in the more popular Fortran language. To pry open the commercial market even more, Hillis is cutting the Connection Machine's \$2 million price: On May 16, the company is scheduled to announce two smaller versions costing under \$1 million that are expected to contain about 8,000 processors.

In fact, TM's competitors are already selling under-\$500,000 machines that use common programming languages. Adaptive Memory Technology and Intel Scientific Computers are able to produce less costly supercomputers by building on manufacturing economies. They use fewer and more powerful processors that, in ISC's case, are stock chips made by parent company Intel Corp. These approaches have worked. AMT International Inc. in Irvine, Calif., sold 40 supercomputers last year. And because these are Fortran-based machines, 1,000 programs have already been written for them.

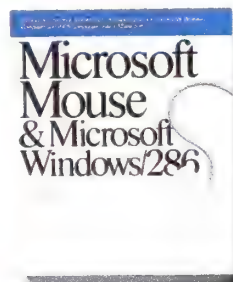
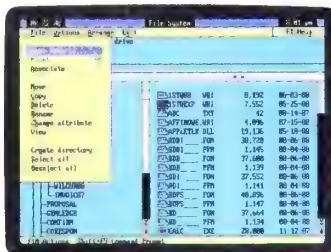
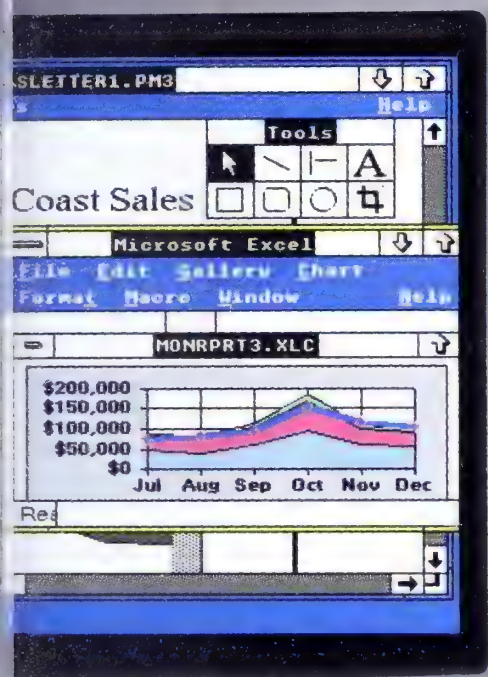
'CREDIBILITY.' Perhaps the biggest obstacle for these machines is the perception that they can't do the everyday work, such as data-base management, that a \$5 million Cray supercomputer does. But that view may be changing. Observers say that Cray Research Inc. and IBM, primarily through its support of former Cray designer Steven Chen, are building parallel machines. That's good news for Thinking Machines and its rivals, because IBM and Cray are apparently working on so-called large-grained parallel supercomputers—which use just a handful of processors—and won't compete head-to-head with massively parallel machines. Says San Francisco-based consultant Jeffrey Canin: "The IBM and Cray computers will add tremendous credibility to the highly parallel market without threatening it."

The makers of massively parallel supercomputers still aren't home from the well for the third time to raise \$5 million from investors such as CBS Inc. Chairman William S. Paley. And Intel just received a \$7.6 million grant from DARPA. Still, customers seem interested now. So maybe everyone will stop asking why an idea with so much potential never quite took off.

By Laura Jereski in Boston

Push your software to the limit.

If you want to get the most out of today's new, high-powered software applications, we have a few words of advice:
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The Microsoft Mouse gives you easy access to all the powerful features today's software has to offer.

It looks innocent enough here, but wait until you see how the Mouse makes your software scream.

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A WEAK FOREIGN CHALLENGE? NOW THAT'S A SWITCH

Outsiders haven't cracked the U.S. phone-switch market yet

If you plunked down \$250 million or more on a new venture, wouldn't you expect to make at least something back in five years? In round numbers, that's how much each of four foreign suppliers of telecommunications switching equipment has spent to win orders from the seven Baby Bells and their 22 local phone companies. But all they have to show in return is losses. In fact, the battle that was supposed to increase competition and spur innovation when the Bell System was broken up in 1984 looks like a near-shutout by American Telephone & Telegraph Co. and Northern Telecom Inc., the market leaders.

Altogether, the new rivals, including West Germany's Siemens, Japan's NEC, and Sweden's Ericsson, have won just under 2% of all U.S. orders since 1984. To put it another way: Switches are measured by the number of phone lines they handle, and this year, AT&T and Northern Telecom will essentially split a Bell market of 8.4 million lines (chart) vs. 500,000 lines for everyone else. In the past five years, the big two have shipped 32 million lines vs. 600,000 for newcomers.

With numbers like that, it's hard to see how any foreign company is going to garner the 10% market share each covets—especially when demand for newer digital switches may be peaking. NBI/Datapro, a research unit of McGraw-Hill Inc., estimates that switch prices have fallen 57%, to \$124 a line, in 10 years. Worse, new orders will actually decline by 28% from 1989 to 1993. That's because the phone companies will have upgraded their smaller switches by then.

GOOD CLASSROOM. Sounds gloomy. But outsiders are determined to fight on. For one thing, they reason that the U.S., which represents a third of the world market for digital switches, can support more than two competitors. Moreover, the U.S. is a good classroom: Overseas

phone companies are starting to get interested in offering the same special services that the Bell companies are developing here, such as call-waiting and an answering-machine-type service. An upcoming offering will let customers see the number of the phone from which a caller is dialing. "None of the [new rivals] has caught up to that benchmark,"

to break into the British market." A new supplier has to adapt its equipment to connect easily to standard Bell work gear. The software that runs central office switches—which are among the most sophisticated computers on earth—must conform to the thousands of network-management systems to run and monitor the vast Bell network.

Millions of lines of software must be written to ensure compatibility—or phones in dense metropolitan areas such as Detroit could go down for hours. What's more, the equipment must be easy to service. Otherwise, the millions of dollars that a carrier theoretically would save by switching to a foreign product will be eaten up in training and maintenance people in new procedures and stocking special replacement parts.

'FLEXIBILITY.' Will the outsiders have more luck? Not unless "they demonstrate something that's better than the existing embedded vendors [offer]," says Joe Long, a procurement contracting manager at Southern Bell Telephone Co.

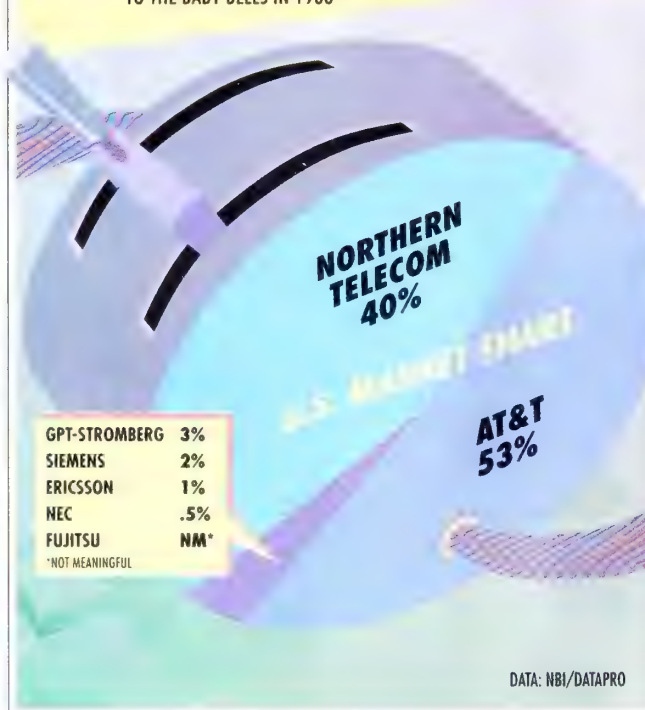
They are trying. Siemens, which has invested \$500 million in the U.S. since 1984 to make up revenues of \$60 million a year, has moved quickly to build up an infrastructure of software engineers and distributors. For this, Ameritech and Bell Atlantic have qualified Siemens as their third supplier. NEC America Inc. will spend at least \$250 million over the next three years to perfect its switches for the U.S. market, says Vice-President Howard Gottlieb. Stromberg-Carlson Corp., a unit of Britain's GPT, is currently leading the pack by marketing smaller central office switches for use in rural areas. And do Profilli, Nynex Corp.'s director of strategic technology planning, likes the fact that Ericsson's "modular software... can be written with great flexibility to modify services."

Such advantages may not be enough, though. NBI/Datapro analyst Francis McInerney expects a product glut by 1993 as annual U.S. capacity climbs 25%, to 25 million lines, and demand slackens. The Bell companies are slowing the replacement of their metropolitan-area exchanges—supposedly the next big procurement round. The outsiders say that will just give them more time to get prepared. And, most likely, to suffer years more of heavy losses.

By John J. Keller in New York

U.S. SWITCH MAKERS STILL DOMINATE THE MARKET

9.4 MILLION TOTAL LINES
SHIPMENTS OF DIGITAL SWITCHES
TO THE BABY BELLS IN 1988



says Doug Lattner, an assistant vice-president at Ameritech Services Co., a unit of the Midwest Bell company, Ameritech. The lessons that Ericsson learns in adapting its switches for the U.S. could be applied to making equipment for, say, British Telecom.

Beyond all this, five years is a relatively short time in which to break the grip of AT&T and Northern Telecom. Ericsson Chief Executive Björn Svedberg points out that "it took us 13 years

The Fujitsu Portable Commander® cellular telephone. Fujitsu makes a full line of Commander® cellular phones.

Commander is a registered trademark of Fujitsu America, Inc.



GIANT KILLER!

Conquer giant communications problems with the pocket-sized Portable Commander® cellular telephone from Fujitsu. It has all the features of phones three times its size, and it's backed by one of the world's biggest names in communications technology: Fujitsu. Fujitsu is a global leader known in over a hundred countries for its high-tech excellence. Write Fujitsu America, Inc., 1100 East Campbell Road, Richardson, TX 75081. Or call 1-214-699-9341.



The global computer & communications company.



New Maximum

Obviously, the car eating up the road above is no ordinary Subaru. In fact, it's a car designed to be like no other car.

It's the new Subaru Legacy.TM The largest, most powerful Subaru ever built.

And if you can look beyond its gracefully sculptured body design, you'll find a wealth of

engineering marvels. Perhaps none more impressive than its 16-valve horizontally opposed aluminum engine. An engine created for maximum acceleration and power. With minimum vibration and noise. An engine so rare its design can only be found on two other cars: Ferrari Testarossa and Porsche 911.

Of course, what good is tremendous power without the ability to properly control it. Accordingly, the Legacy boasts such strong suits as a maximum stability suspension system, electronic automatic transmission for maximum efficiency, and standard 4-wheel disc brakes.

Furthermore, you can pur

© Subaru of America, Inc. 1989. *Suggested retail price. Does not include dealer preparation, inland transportation, taxes, license and state or title fees. Dealer's actual price may vary.



The Subaru Legacy

Strength Subaru.

...e a Legacy with road
...ing front wheel drive or
...world's most advanced
...puterized full time four wheel
...e system. For the ultimate in
...ion control.

As exhilarating as the Legacy
...the road, it's equally impres-
...from within. Fact is, the
...cy takes all those cars that

claim to be "space vehicles" to
task. It not only provides more
interior and trunk room than ever,
it provides it in a remarkably luxu-
rious setting.

And starting at about
\$12,500,* the Legacy proves there
is also strength in numbers. Rather
reasonable ones at that.

Finally, the Legacy continues

in the Subaru tradition of reliable,
durable cars. Which means it's one
new car that will help you avoid
buying something else that comes in
a new maximum strength: aspirins.

Subaru Legacy
From About \$12,500

PROMOTERS



ABERCROMBIE: SO FAR, HER STABLES OF FIGHTERS AND HORSES HAVE BEEN UNSPECTACULAR

AN OIL HEIRESS LOOKS FOR PAY DIRT AT THE TRACK

Josephine Abercrombie's bid to bring horse racing to Texas

Inside the noisy clubhouse of Gulfstream Park in Hallandale, Fla., oil heiress Josephine Abercrombie is waiting for one of her horses to run. But with an hour until race time, she is attending to another concern. Her attention is riveted on a tiny TV screen. "Oh wow, he got him to the body," she squeals as a boxer she promotes pummels his opponent. "Come on," she bellows, lifting her right arm in a defiant uppercut. Minutes later, though, her fighter slips. "I can't see," she cries. "Wait. . . Uh-oh." It's a knockout in six.

Abercrombie, 63 years old and worth more than \$100 million, may seem out of place in this back-slapping, cigar-chomping environment. But she couldn't be more comfortable. She has been a horse breeder for 40 years and a boxing promoter for six. Never mind that neither enterprise earns much money, if any. She likes the competition. "I think I'm an adrenaline junkie," she confesses.

But now, Abercrombie is determined to make at least one of her passions pay off, too. Trying to cash in on recently legalized horse tracks in the Baptist bas-

tion of Texas, Abercrombie and a group of investors are planning a bid to build the first major track in Houston.

She has put up a good fight so far. As vice-chairman of the Texas Horse Racing Assn., a lobbying group, Abercrombie trotted before editorial boards and legislators to plead for legal wagering. "The doors opened wide," says Ricky Knox, the association's executive director. After a 20-year fight, the Texas legislature in 1987 took the issue to voters, who passed racing by almost a 10% margin. Abercrombie is trying to kick the doors open even wider by pressing for the legislature to reduce its tax on racing. Her group hopes to get a bill through by summer's end. Once that happens, they plan to put up an estimated \$90 million to build a track.

ON THE BLOCK. Owning a racetrack would be a fitting achievement for Abercrombie. The daughter of J.S. Abercrombie, a Texan who made a fortune by inventing a special valve for oil wells, she began riding horses before age six, and by 27 had won a dozen ribbons in the National Horse Show. After study-

ing racing on Long Island in her 20s, she began training racehorses at Ascot Park in Akron, Ohio. Over the years, Abercrombie married and divorced five husbands, including a Kentucky horseman and an Argentine architect. She has been single since 1981.

For 25 years, Abercrombie has been a director and 8% shareholder in the company her father founded, Cameron Iron Works. Her two sons recently decided to sell their own 40% stake, and on Apr. 5 Cameron management put the entire company on the block.

Abercrombie spends most of her time these days at her new, 750-acre horse breeding facility in Lexington, Ky. Throughout her career, her Pin Oak Farm has bred 146 racehorses. But few many have crossed the finish line for her. According to Bloodstock Research Information Services, horses bred by Abercrombie have generated only \$2.5 million in winnings since 1950. By comparison, in 1987 alone, the latest year for which figures are available, Dallas' Neil Bunker Hunt pulled in more than \$5 million on horses he bred. Not one to give up, Abercrombie has hired a new director of operations to help her cull a stable of 80 horses for only the best stock. "You'll have to win or you'll have to sell," says Abercrombie.

NO HEAVYWEIGHTS. Her boxing business might benefit from that attitude. When she founded the Houston Boxing Assn. in 1983, her goal was to create a group of top-notch fighters and sponsor bouts in Houston, Las Vegas, and Atlantic City. But none of her 15 fighters has become a star. Some boxing managers think Abercrombie doesn't know enough about the business to be a success.

No one could say she doesn't know about her boxers, though. When pro fighter Frank Tate lost a title bout in Las Vegas last year, recalls boxing promoter Robert Arum, she broke down in tears and then refused to attend a post-fight gathering. Abercrombie denies crying but doesn't dispute that she's different from most promoters: She gives her boxers periodic CAT scans, puts money aside for their retirement, and instructs them how to act at the society functions she drags them to. "My friends all think I'm nutty," she says.

No one thinks she's nutty for trying to build a racetrack, though. If a group manages to come in with a better bid than the two that have already been submitted, she stands to make millions from leases, concessions, and wagering. Perhaps more important, it would be the ideal place for Abercrombie to get an adrenaline fix.

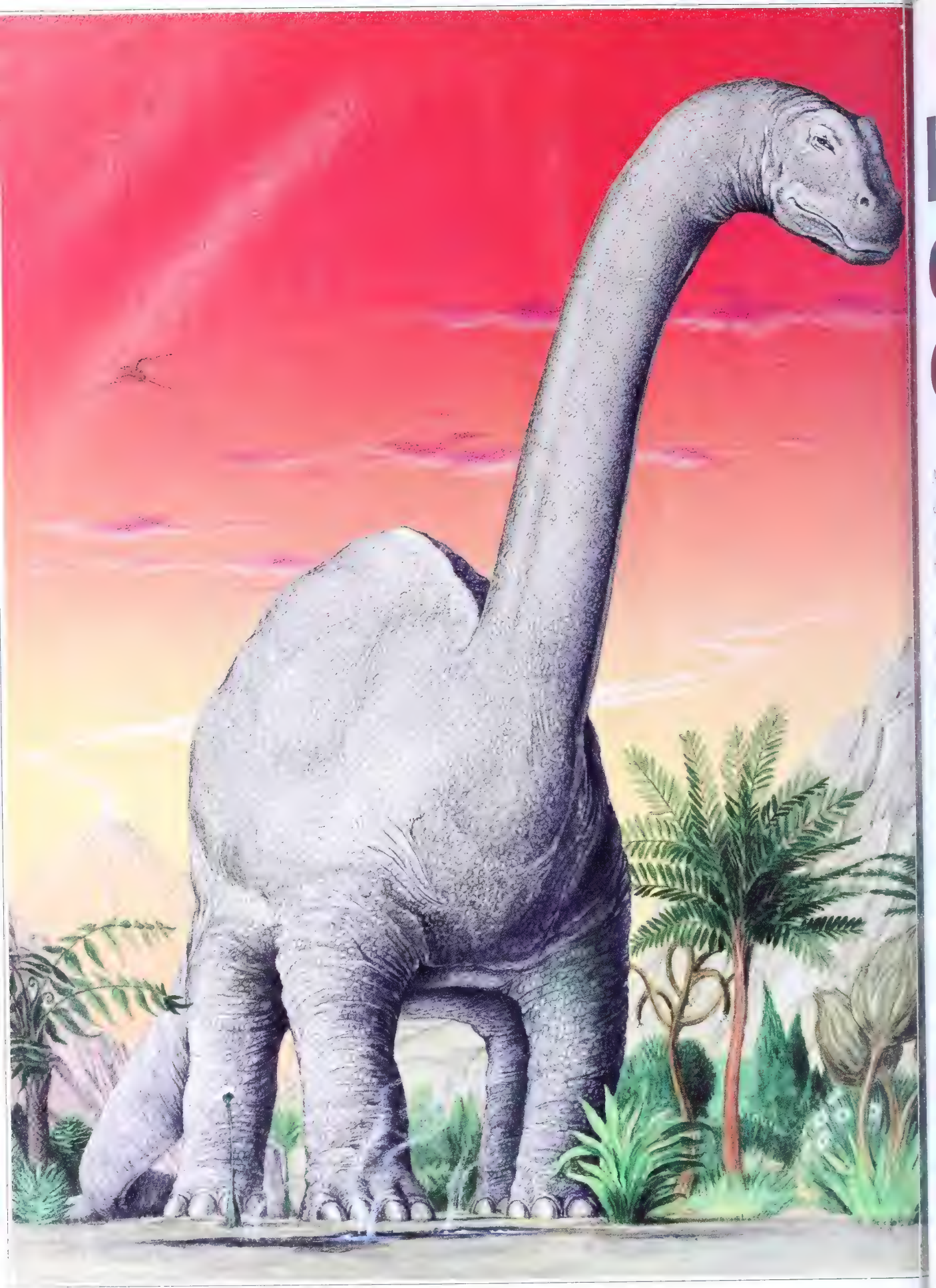
By Todd Vogel in Houston

"When I said vodka
I meant Denaka."



Imported
from Denmark.

In a world of absolutes, Denaka excels.



History is full of giants who couldn't adapt.

In the history of telecommunications AT&T has long been the giant. But recently the environment has changed. As a result of today's open marketplace, for the first time, the giant is facing real competition.

We're ITI, and we're among the fastest growing companies in the telecommunications industry. In the past, when only one company could provide long distance operator services, you received whatever they chose to provide.

Now, ITI offers you a whole new world of innovative operator services, while the giant continues to lumber along.

Unlike the giant, we can respond to your special needs quickly and efficiently. That means when you need multilingual operators, we have them now. When you need message forwarding, we offer it now. We listen. And we are committed to keep listening.

So whenever you choose an operator services company, remember: size isn't everything. In the end, it's the smarter, quicker guy that prevails. That's how evolution works.



ANOTHER WINNER FOR THE BUSH FAMILY?

George Jr.'s Texas Rangers are playing well and filling seats

George W. Bush has long toiled in the shadow of his more famous father. The 42-year-old son of the President followed Dad's example by going to prep school, then to Yale, then into the armed forces. George the Younger, as he's nicknamed, continued that cycle when he went into the oil business. There's even a rumor Bush will run for office next year.

These days, though, young George hardly has time for politics. On Apr. 18, he and 15 other investors, including former Bass brothers investment manager Richard E. Rainwater, bought the Texas Rangers for \$46 million. Since then, Bush has been busy learning professional baseball. So far, it's a delight. Five weeks into the season, the team that was the perennial patsy of the American League was looking like a winner at last. The new owners, with Bush as managing partner, are benefiting from off-season deals engineered by General Manager Tom Grieve, whose catches include superstar pitcher Nolan Ryan, still in top form at 42 and arguably among the greatest pitchers in baseball history.

AGING BANDBOX. The owners have a major-league problem, however, and it's called Arlington Stadium. The 43,508-seat facility originally was built as a minor-league ballpark. When the second Washington Senators franchise moved to Arlington, Tex., to become the Rangers in 1972, the fastest and cheapest way to expand the seating capacity suitable for a big-league team was to build bleachers—lots of them. Today, nearly half the total seats are in the outfield, commanding a ticket price of just \$4. There are only 8,000 prime, \$10 seats.

Many corporate biggies in the Dallas-Fort Worth area today very much want to buy season boxes, but such seats are heavily oversubscribed. "We just don't have the product," admits Bush.

Now, the Rangers need those seats more than ever. Last year, the team finished 33½ games out of first place and drew just 1.6 million fans, fourth-worst in the league. But because salaries were so low, the team earned about \$3 million on revenues of \$30 million. The team's



ROOTING FOR THE HOME TEAM: BUSH (CENTER) WANTS TO BUILD A BIGGER, DOMED STADIUM

new, high-priced talent this season will help push the payroll up 40%, to \$10.5 million. And the team also must make payments on one of the biggest debt loads in baseball—\$25 million, much of it run up buying Arlington Stadium. Just to break even, the Rangers will have to draw nearly 2 million fans, the equivalent of filling the park to 50% of capacity for every single home game.

Over the short term, Bush plans to use his Washington connections to help reach that goal. On May 4, First Lady Barbara Bush, wearing a Ranger warm-up jacket, threw out the first ball at a Rangers game against the visiting New York Yankees. She also presented a puppy named Rangerette to her son. "I'll be good for getting publicity," says George.

"What other owner can call on the First Lady to throw out a ball?"

The long-range solution, however, is a new stadium. "The present stadium is a big handicap," says previous owner Eddie Chiles. Rangers President Michael Stone figures the team could have increased revenues by \$3 million last year if it had had more premium seats to sell. Bush is already thinking about new stadium sites. He hopes to sell the old facility and its 125-acre parking lot to a developer for \$40 million. That could help finance a new domed stadium in downtown Dallas.

SOLID FARM SYSTEM. A winning season would help build the fan interest that would make a new stadium profitable, but winning could prove to be a double-edged sword: It would guarantee high player costs next year. After their championship season last year, the Oakland A's player costs jumped 30%, to \$15 million. Bush hopes to avoid this problem

by bringing players up from the Rangers' talent-rich farm system.

If the Rangers continue their winning ways, the excitement could help Bush achieve more personal goals. He has a political office. His appetite whetted by 18 months on a campaign trail, he is weighing a run for governor of Texas. He says the media attention he's getting as managing partner will help him "overcome an image problem."

meaning most Texans know little about him. But fellow Republicans aren't too sure. Says GOP State Chairman Fredrick R. Meyer: "If the Rangers do well, the favorable aura will rub off. But if they stumble, so will his fortunes."

For now, Bush has to concentrate on filling the Rangers' coffers. Even assuming that fans continue to show up in record numbers, as they have early in the season, he must find a way to increase the proceeds in the old stadium while keeping a lid on player costs. Quite a job for a small-time oilman from dusty Midland, Tex. Perhaps that's why the First Lady offered her son some motherly advice recently: Forget politics, and concentrate on baseball for a while.

By Kevin Kelly in Arlington, Tex.

1988 ANNUAL REPORT DIRECTORY

SPECIAL ADVERTISING SECTION

Year after year, annual reports offer investors a chance to view a company's performance potential. By outlining past and present statistics, such as sales, earnings, and dividends paid, an annual report can be a vital investment tool. Annual reports also offer pertinent information about future expansion, diversification and other factors that determine a company's direction.

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AMP Incorporated

1



15% growth rate for over 30 years. 9% of sales spent on RD&E. Good growth expected in 1989.

	Sales, Mil.	EPS	Div.
1988	\$2,070	\$2.42	\$1.10
1987	\$1,970	\$2.37	\$1.05
1986	\$1,830	\$2.21	\$1.00
1985	\$1,690	\$2.04	\$0.95

Steady Growth — Through new products and markets, sales were up all but 4 of 47 years with 80% of sales electronics-oriented and 80% of sales were products applied by AMP tools & machines. **Broad Diversification** — It is the leading producer of electrical/electronic connection devices and services virtually every manufacturer of electrical & electronic equipment (over 50,000) and tens of thousands of customers who install this equipment. Subsidiaries in 26 countries. Strong worldwide capabilities. Debt-to-equity 15%. (NYSE:AMP).

American Express Company

3



American Express is a world leader in charge cards, Travelers Cheques and travel services. It also provides financial planning, private banking, securities brokerage, asset management, investment banking and data-based services.

Earnings for 1988 topped \$1 billion on record revenues, reflecting continued growth in the Company's innovative, customer-focused products and services.

BFCE

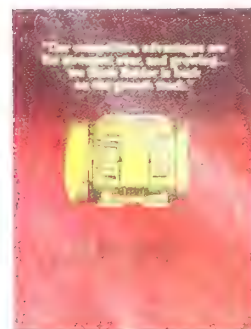
5



BFCE stands among the main French banks in providing to internationally oriented firms a full range of financial facilities and services, ranging from corporate lending or trade financing to treasury products and equity financing. Through its presence in the world's largest money centers, BFCE is an active participant in currency or interest rate hedging as well as in all other treasury activities. In 1988, its balance sheet reached US \$43 billion.

Baldor Electric Company

7



Report highlights important competitive advantages which include a broad line of top quality energy-efficient industrial electric motors. Baldor stays "closer to the customer" by providing information which "is the best in the industry."

1988 sales and profits were up impressively, and the financial condition is very strong.

American Brands, Inc.



American Brands, Inc. is a worldwide holding company with three core businesses — tobacco products, life insurance and distilled spirits, and emerging core businesses in office products and hardware and home improvement products. Specialty businesses include golf and leisure products and optical goods and services. In 1988, revenues from continuing operations were \$1.1 billion up 19%, and net income equaled \$5.84 per share, up 27% — both records.

Ameritech



Ameritech is one of the nation's foremost information corporations. The Ameritech Bell companies serve 12 million customers in Illinois, Indiana, Michigan, Ohio, and Wisconsin. The Ameritech Enterprise Group provides products and services in cellular communications, paging, lease financing, directory publishing, voice messaging and audiotex. In 1988, Ameritech's earnings rose 4.1% to \$1.24 billion.

BSN Group

6

With sales volume of FF 42.2 billion, BSN is the leading French agro-food group. In 1988, BSN's consolidated net income was FF 2.1 billion, 41% above the figure of 1987 and almost three times that of 1984.

Thanks to growing internationalization, BSN has reinforced its position on global markets: major worldwide dairy products and mineral water producer, main European brewer and pasta producer, number three world position for biscuits and champagne, leading European bottle producer.

The Group has well recognized brand names such as Gervais, Danone, Kronenbourg, Panzani, Liebig, Amora, HP, Lea & Perrins, Mother's, Salerno, Evian, Badoit, Saratoga, Pommery, Lansberg, Scharffenberger, etc.



Bell Atlantic Corporation



Bell Atlantic is a leading provider of telephone systems for both voice and data applications, cellular communication, computer maintenance service and equipment leasing and financing. It is the 31st largest corporation in the United States. In 1988, Bell Atlantic generated \$11 billion in revenues and \$3.5 billion in cash flow for operations and investments. Earnings for 1988 were \$1.8 billion on an asset base of \$25 billion.

Brush Wellman Inc.

9



Brush Wellman Inc. is a leader in beryllium technology and a worldwide supplier of high reliability engineered materials. We are a fully integrated producer and supplier of beryllium, beryllium alloys and beryllia ceramic. We also supply specialty metal systems and precious metal products.

Brush Wellman engineered materials have many applications in aerospace, defense, computer, electronic and telecommunication markets.

A strong commitment to research and development, modern processing facilities and a worldwide distribution network support the Company's product lines.

CSX Corporation

10



CSX Corporation, with assets of \$13 billion and 1988 revenue of \$7.6 billion, is an international transportation company which offers rail, container shipping, barging and trucking services, and has interests in real estate, resorts and technology.

Canadian National

11



Headquartered in Montreal, Canadian National is a commercial Crown corporation providing quality rail-based transportation services for business and industrial customers in Canada and the USA. With annual revenues of Cdn. \$4.7 billion and 44,000 employees, CN is also active in real estate management and development, oil and gas resources, and consulting.

Cap Gemini Sogeti

12



Cap Gemini Sogeti, an independent and public group with more than 12,000 employees, is one of the leading DP service companies in the world and the largest in Europe. In 1988, Cap Gemini Sogeti realized consolidated revenues of FF 5.8 billion (+43.6%), distributed among the U.S. (CGA) and Europe. Net profitability after taxes reached FF 402 million (+43.6%), which represents 6.9% of revenue. The company is registered on the Monthly Settlement Market of the Paris Stock Exchange and its leadership is acknowledged in all advanced software technologies.

Centel Corporation

13



Centel Corporation provides telecommunications services throughout the country. The company has expanded from a telephone operating base to become a leader in the rapidly expanding cellular communications field. Centel Cellular serves 40 U.S. markets and is a limited partner in New York City and other major metropolitan areas. Stock trading symbol: CNT.

Coach Investments, Inc.

14



Coach Investments, Inc., a New York City firm, is the only public company in the world which deals exclusively in postage stamps. Besides marketing and owning one of the largest and undervalued stamp inventories in the world, their parent company, International Stamp Exchange Corporation, runs a multi-million dollar stamp exchange similar to that of the stock market. In a recent acquisition they purchased two million shares of a company whose stock is currently traded at \$6 per share, or \$12 million dollars. Many other potentially lucrative business ventures are planned for the coming year.

Comdisco, Inc.

15



Comdisco is engaged primarily in buying, selling and leasing new and used IBM computer equipment and arranging related financings. It also arranges leases for communication and other high-technology equipment. The Company, through its wholly-owned subsidiaries, provides disaster recovery services for computer users, and invests in oil and gas properties.

Cyprus Minerals Company

16



Cyprus Minerals Company (NYSE:CYM, CYMpr) is a major producer of copper, molybdenum, specialty molybdenum products, lithium, coal, talc, barite and a growing producer of gold and silver.

Cyprus earned \$170 million or \$6.31 a share in 1988 on revenues of \$1.3 billion. Assets totaled \$1.6 billion, net worth was \$1.2 billion and book value per share was \$38.43. Cyprus employs more than 7,300 people worldwide.

Ericsson

17



Ericsson is a world leader in telecommunications, based on advanced technology, network competence, international experience and customer orientation. Ericsson is also a leading supplier of electronic defense systems.

The company has slightly more than 65,000 employees and operations in 80 countries. Sales in 1988 amounted to SEK 31,297 million (32,400 in 1987). The decline is due to substantial divestments during the year. Order bookings rose to SEK 35,633 million (33,405).

Consolidated operating income before appropriations and taxes amounted to SEK 1,840 million (1,108).

Georgia-Pacific

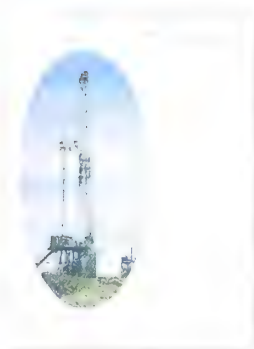
19



Georgia-Pacific Corporation, one of the world's largest paper and building products companies, posted another record year in 1988. G-P generated \$865 million in cash and invested \$1.6 billion in capital projects, acquisitions and an aggressive stock repurchase program. A key factor in Georgia-Pacific's performance has been the growth of the pulp and paper business which, for the first time, outearned building products for the year.

Hailey Energy Corporation

21

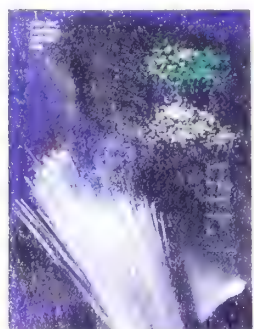


HECC oil and gas concession and lease holdings increased from 5,228 acres in 1985 to 17,148,000 acres in 1989. Half the acreage adjoins Australia's block with the largest onshore production along a 200 mile joint boundary. HECC also operates wells and owns a gas pipeline to the U.S.

Telephone: (915) 676-8529.

JWP Inc.

23

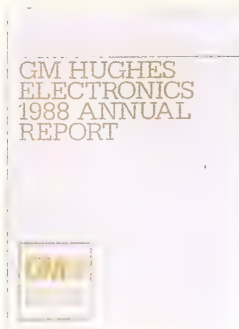


JWP is the premier technical services company in the U.S., specializing in high-technology systems and services.

In the year ending December 31, 1988, revenues increased by 45% to \$925 million and earnings increased by 25% to \$27.8 million, representing the Company's eighth consecutive year of record results.

GM Hughes Electronics

1



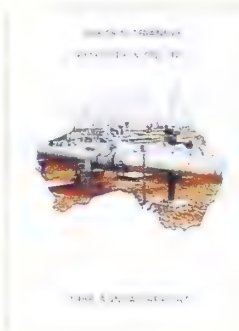
GM Hughes Electronics (GMHE) is a world leader in advanced automotive, defense and space electronics through its Delco Electronics Corporation and Hughes Aircraft Company subsidiaries.

Record earnings, revenues and profit margin were achieved for the third consecutive year in 1988. GMHE earnings increased 20% to \$802 million in 1988, and revenues grew to \$11.2 billion. The 1988 profit margin rose to 7.1% from 6.4% in 1987.

Quarterly dividends have been increased 140% since GMHE's initial public offering in 1986.

Golden Triangle Royalty & Oil, Inc.

2



Combined potentials exceeding 19,000 barrels of oil per day were discovered on ATP 299P in Queensland, Australia. Just one of 19 concessions covering more than 74,000,000 gross acres under which GTRO holds overriding royalty interests. Purchased interests in 90 U.S. producing properties in 1988. GTRO has no debt and uses conservative royalty approach to the oil and gas business (NASDAQ:GTRO)

Ivaco Inc.

25

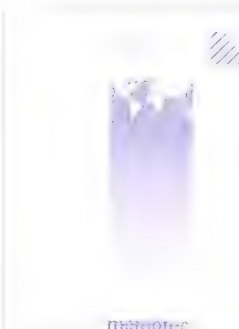


Ivaco is one of North America's largest steel producers with annual steelmaking and rolling capacity in excess of two million tons. It is a major manufacturer of finished steel products produced from hot rolled wire rods, in addition to plastic/concrete/iron pipe, paper machine clothing, coppermetals and other products. It also fabricates and erects structural steel in both Canada and the U.S.

Ivaco had sales of Cdn. \$2.2 billion and earned \$51.5 million from continuing operations in 1988. Listed: Toronto and Montreal.

Memotec Data Inc.

2



Memotec is a corporation with international scope; it designs, manufactures and markets a comprehensive range of data communications products and services.

The Company is also a systems integrator, a telecommunications consultant and the sole carrier for Canada's overseas telecommunications services.

During the past five years Memotec revenues have grown 115 fold to \$39 million and Company profits 33 times to \$33.5 million.

The Company's assets are in excess of \$900 million and the average revenue per employee is over \$178,000.

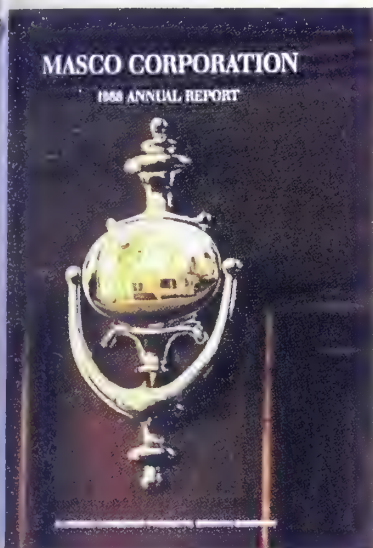
Masco Corporation

25

"A Unique Consumer Products Growth Company"

Masco Corporation has reported 32 consecutive years of earnings increases. Sales and earnings have increased at average annual compound rates of approximately 20%.

Read our 1988 Annual Report to learn why we believe, Masco's earnings will continue to grow at an average annual rate of 15 to 20% annually over the next five years, with our sales in 1993 approximating \$1 billion.

**Masco Industries**

26

"A Unique Industrial Growth Company"

Masco Industries is a technology-based company whose corporate objective is to achieve above-average growth by utilizing our design, engineering and manufacturing skills to develop innovative processes and products for an expanding number of markets.

Our objective is to increase earnings per common share, on average, at least 20-25% annually, and thus to establish Masco Industries as a unique industrial growth company.

**MoDo**

27



Following the merger with Holmens Bruk AB and AB Iggesund Bruk, the MoDo group is one of the largest groups in the world active solely in the forest industry.

The business is focused on the production and sale of wood-free fine papers, wood-containing printing papers, paperboard and pulp. In 1988, the group's turnover amounted to SKr 19,532m. Some 80% of total sales went to countries outside Sweden. The operating profit in 1988 was SKr 2,191m. The group has its own powerful marketing and sales organizations in Western Europe and the United States as well as agents in many other countries.

Nationale-Nederlanden NV

28



Nationale-Nederlanden, one of the world's leading insurers with 25,000 employees working in 22 countries, reported strongly increased 1988 profits and revenue. The group offers services in all types of life and non-life insurance, including professional reinsurance and other insurance-related services.

The executive board expects further improvements in profit and revenue in 1989.

New England Electric System

29



A public utility holding company with subsidiaries serving customers in Massachusetts, Rhode Island and New Hampshire.

- 1988 rate settlement reduced financial uncertainties.
- Paid 166 consecutive dividends.
- 5.9% KWH sales growth in 1988.
- Lowest-cost provider of electricity among major utilities in each state served.
- Favorable fuel mix: 44% coal; 28% oil; 15% nuclear; 13% hydro and alternates.

Norfolk Southern Corporation

30



Norfolk Southern Corporation, "The Thoroughbred of Transportation," is a Virginia-based holding company that owns all the common stock of and controls two major operating railroads, Norfolk and Western Railway Company and Southern Railway Company, and a motor carrier, North American Van Lines Inc. Increases in traffic, higher revenue yields and cost reductions resulted in record net income of \$635 million in 1988.

Norsk Data AS

31

Norsk Data is a European-based company in the Information Technology industry. In 1988, the company initiated an extensive restructuring with some strategic changes in manufacturing and R&D. These changes included the creation of Dolphin Server Technology, increased focus on end user solution activities for proprietary and standard platforms, as well as becoming more of a systems integrator.

**Norsk Data****NYNEX**

In just five short years, NYNEX has grown from a regional supplier of telecommunications services to a multi-faced global leader in the information industry, with an international family of companies totaling \$25.4 billion in assets. Today, our New York Telephone and New England Telephone subsidiaries provide advanced network services to most of the Northeast and our ten operating companies have become pioneers in the development of innovative business and information services, office systems, software and publishing services. For the challenges of the information age, the answer is NYNEX.

PacifiCorp

33



A diversified electric utility, PacifiCorp (NYSE, LSE, PPW) derives nearly 40% of its \$3.5 billion in annual revenues from nonelectric sources. Its electric utility operation, through Pacific Power and Utah Power, provide service to 1.2 million customers in seven western states. Nonelectric businesses include NERCO, a coal, silver and gold mining as well as natural gas and oil subsidiary; Pacific Telecom, a telecommunications subsidiary with local, long distance and international service, and financial services, engaged in commercial leasing and lending. 1988 EPS: \$3.46 — up 9% from 1987. Annual dividend: \$2.64.

Phillips Petroleum Company

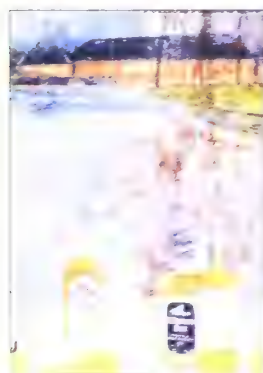
Phillips enters 1989 having achieved one of the most dramatic turnarounds in the petroleum industry.

The main reason for Phillips performance: superior integration that enables the company to produce more higher-value products — gasoline and plastic pipe — per barrel of raw materials than most major petroleum companies.

The company's 1988 annual report highlights Phillips 18% increase in earnings; its impressive share-price appreciation; record downstream performance; its 142% replacement of reserves and more.

Pernod Ricard

34



Pernod Ricard is the world leader of anise drinks, the number one producer of spirits in Continental Europe and the first in France for vintage wines and soft drinks. It is also the world leader in fruit processing for the milk industry.

Since it was founded in 1975, the group has continued to diversify and develop its activities internationally with an average annual increase of 15%.

In 1988, Pernod Ricard's turnover was FF 13.5 billion (\$2.2 billion) with a net profit of FF 750 million (\$119 million).

**Portland General Corporation**

35



Portland General Corporation (NYSE PGN) owns subsidiaries in electric services, real estate, and financial services. Its flagship subsidiary, Portland General Electric Co. (PGE), serves 552,000 electric customers in Oregon.

In 1988, Portland General earned \$2.11 per share — a 25% increase over 1987 operating results — and paid a dividend of \$1.96 per common share.

SEB Group

36



Since the acquisition of Rowenta on July 1, 1988, the SEB Group has become a leading manufacturer of small domestic appliances in Europe, and one of the largest in the world.

Its sales, under the brand names Carrowenta, SEB and Tefal, amounted to FF 5.15 billion and net income was up to FF 184 million.

Saab-Scania

38

Saab-Scania develops, manufactures and markets products in the "means of transport" sector: cars, trucks and buses, civil and military aircraft, missiles and satellites, as well as industrial automation.

In 1988, consolidated sales of the Group amounted to SEK 42.5 billion and consolidated income to SEK 3.2 billion. Pre-tax return on capital employed was 19.4% and the equity/assets ratio 50%. Capital expenditures for property, plant and equipment and expenditures for research and development was SEK 6.3 billion, equal to 14.8% of consolidated sales. There were 50,000 employees.

**Tribune Company**

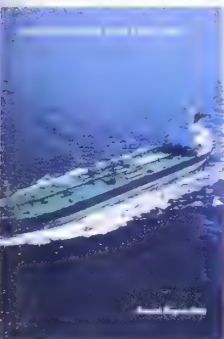
40

Tribune Company (NYSE:TRB) is a diversified media company. Through its newspapers and radio and television stations, it can reach nearly one out of five U.S. households every day with news, information and entertainment. The company is the nation's fourth largest newspaper publisher and television broadcaster. Tribune produces television programming, owns the Chicago Cubs baseball team and manufactures newsprint. In the last five years, Tribune's average annual total return to stockholders has been almost 25%.

**Overseas Shipholding Group, Inc.**

42

OSG, one of the world's largest bulk shipping companies, is engaged in the ocean transportation of liquid and dry bulk commodities. It owns and operates a fleet of 58 vessels, aggregating 5.3 million deadweight tons (dwt), and has on order 10 new buildings, totaling 1.2 million dwt. OSG's strong financial condition and the prospects for the bulk shipping markets are detailed in the Company's Annual Report. (NYSE:PSE:OSG)

**UtiliCorp United**

44

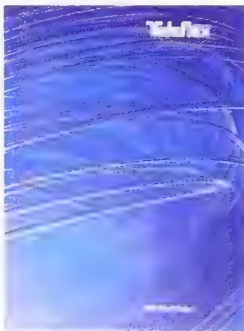
Serving 650,000 customers in seven states and one Canadian province, UtiliCorp has grown rapidly in recent years. It has made five utility acquisitions totaling \$355 million since 1984, and is also active in non-regulated areas of the utility industry. Net income rose 34% in 1988 to a record \$40.9 million. (NYSE:UCU)

**Teleflex Incorporated**

39

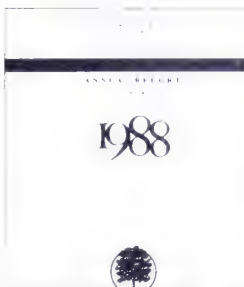
For the fourteenth consecutive year, revenues reached record levels, advancing 21% over 1987 to \$328 million. Net income increased 22% to \$24 million. EPS grew 24% to \$2.22. Over the past ten years, the common stock price has increased at a compound rate of 27% and the average ROE has been 21%.

Teleflex is an applications engineering and manufacturing company serving diverse markets with proprietary control products, medical devices and coatings and repair services, worldwide.

**Twentieth Century Investors, Inc.**

41

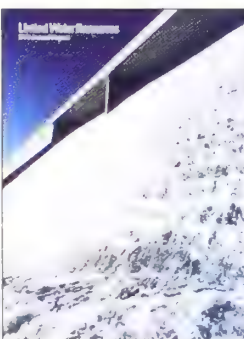
Twentieth Century offers a family of 12 no-load mutual funds, including six common stock funds, five fixed income funds, and a balanced fund. For a free Information Kit and Prospectus, including our charges and expenses, call toll-free: 1-800-345-2021. Or write to P.O. Box 419200, Kansas City, MO 64141-6200. Please read the Prospectus carefully before investing.

**United Water Resources**

43

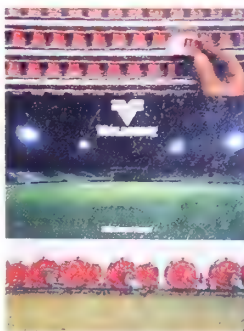
United Water Resources (NYSE:UWR)

- Hackensack and Spring Valley Water Co's. — supply water to one million NJ/ NY residents; abundant water supply.
- Rivervale Realty — owns/develops prime NJ/NY land.
- Other subsidiaries engaged in
 - environmental testing.
 - metering systems/services.
 - consulting for water/sewerage utility establishment.
 - purchasing/building/operating water/sewerage utilities.

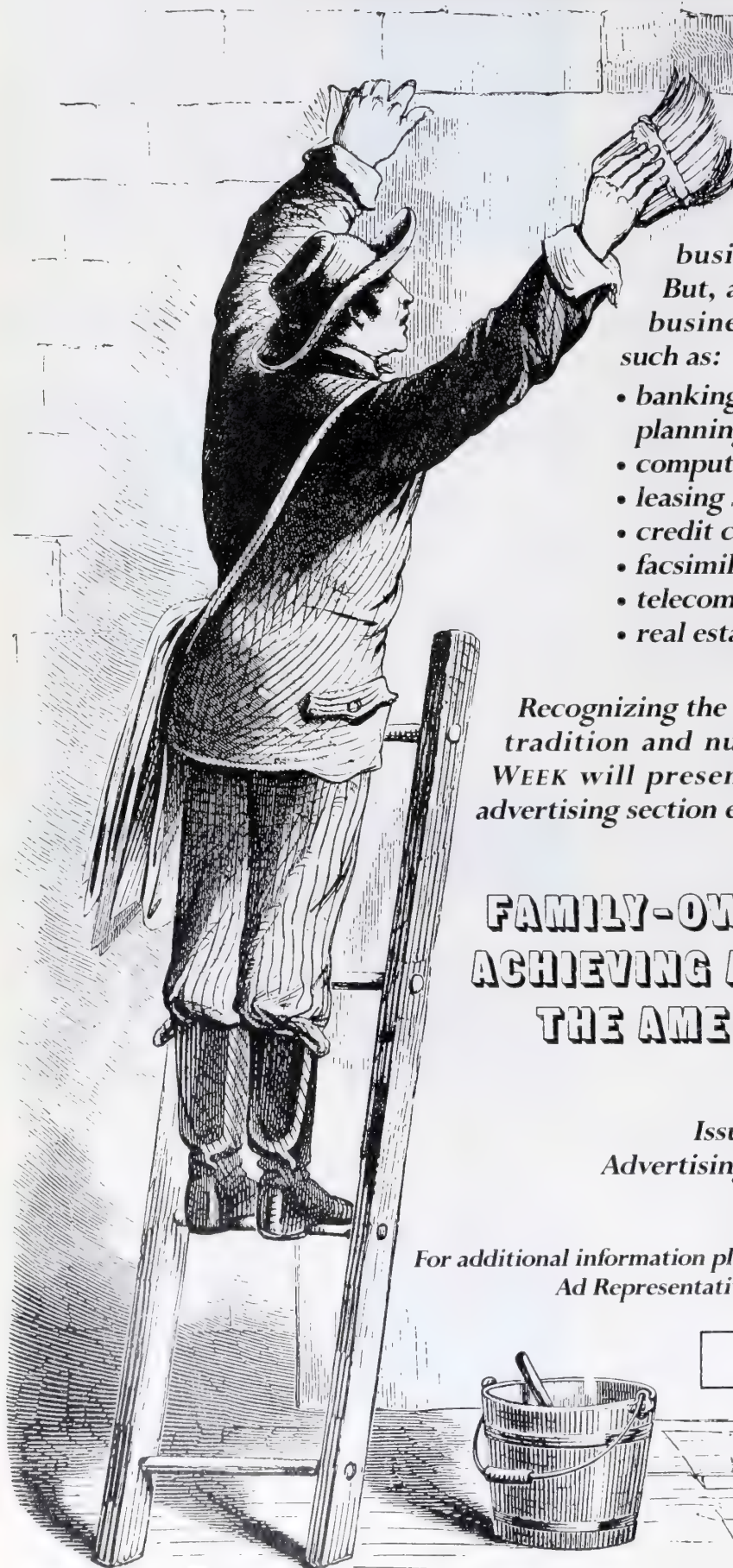
**Valmont Industries, Inc.**

45

Valmont is a growth oriented global company which manufactures components for the electrical industry, including poles and ballasts for the lighting and utilities markets; produces mechanized irrigation systems for worldwide agricultural markets; operates rebar fabrication plants; and owns 74% of Val-Com, Inc., the nation's fourth largest marketer of microcomputer products and services.



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Smart Money

CDs THAT ARE FAST ON THEIR FEET

The good old-fashioned certificate of deposit is showing up in racier form these days. Many banks and thrifts are heavily promoting "adjustable" or "variable" rate CDs, whose yields are pegged to such things as short-term Treasury bills, the prime rate, even inflation. The banks and thrifts argue that these CDs assure investors that they won't miss out if interest rates go even higher. But these products detract from the main virtue of the fixed-rate CD: predictability.

One popular approach is to tie rates on CDs to T-bill rates, plus a percentage point or so. Rates on some varieties of CDs "step up" periodically, while "bump ups" allow for increases only if the bank's rates on new CDs

One CD keeps ahead of inflation by at least three points

go up. Both have competitive base rates for a cushion, and some allow one-time, no-penalty withdrawals. Investors may also be able to add to their CD over its term.

But some more exotic adjustable-rate CDs leave you exposed to market downturns. The "Floating Rate CD" offered by First New York Bank for Business (212 644-0670) is a case in point. The CD hovers 1.5 percentage points below the prime rate. Today, it boasts a 10% rate to the prime's 11.5%. But the CD has no base rate, or "floor." And your minimum deposit of \$25,000 is locked in for terms ranging from 6 months to 10 years.

One of the more unusual offerings is the "Inflation

Edge CD" issued by Franklin Savings Assn. (913 242-6300), based in Ottawa, Kan. For maturities of less than five years, Franklin guarantees a rate that outpaces inflation by at least three percentage points, which happens to be approximately the margin by which interest rates historically have exceeded inflation anyway.

The Franklin rate, changed quarterly and based on the government's monthly consumer price index, is now 7.336% on a one-year CD. For maturities over five years, the spread is 3.2 points. The minimum deposit is \$10,000, and the CD is available through brokerage firms.

SHOP REGIONS. Where you place your bet depends on your economic assumptions. CDs tied to the prime offer more stable rates, says Norberto Mehl, chairman of Banxquote Money Markets, a New York-based information service. "The CPI changes monthly, and the discount rate on T-bills changes weekly at the auction, but the prime changes only a few times a year," says Mehl.

Shop around and you can get double-digit yields on plain-vanilla CDs, too. Mehl says most of the highest yields are in the Northeast, with a few in California and Texas. Banxquote surveys show national highs for fixed-rate CDs at 10.65% for three months, 10.68% for six months, and 10.79% for one year. The average bank yields for the week that ended May 5 were a couple of percentage points lower—8.61% for three months, 9.07% for six months, and 9.32% for one year. So you may be better off sticking with a conventional CD—unless you expect interest rates to soar. *Suzanne Woolley*



Entrepreneurs

A LITTLE PLASTIC CAN HELP SMALL COMPANIES, TOO

A corporate travel-and-entertainment card for a small business might seem a contradiction in terms. But T&E titans American Express, MasterCard International, and Visa International all offer scaled-down versions of the traditional card, tailored to fit small-business needs.

All of the cards offer some sort of management information system (MIS) report to help companies monitor and manage expenses by breaking them down by employee and by category—air travel, car rental, and so on. They also provide coverage that allows you to skip the charge for that annoying collision-damage waiver on rental cars. The cards have the requisite emergency travel-assistance programs as well. But each of the companies adds its own spin.

American Express has a large package of benefits. As well as discounts on hotel rates and auto leasing, its Corporate Card (\$55 annually) provides disability insurance: \$50,000 for you and your card-carrying employees. That's after six years; it's \$25,000 from the second to the sixth year, and \$10,000 for the first.

MasterCard and Visa are hot on the heels of American Express. They emphasize wider merchant acceptance of

their cards, the greater number of automated teller machines cardholders can use, and generally lower annual fees, ranging from \$20 to \$50 depending on the bank.

MasterCard's Business card lets employers set individual credit limits for employees. The card's newest perk: cardholders need not tap a personal corporate policy before the card's collision loss/damage coverage kicks in, so the coverage is no deductible. And coverage on personal effects inside the property of any firm's employees or clients traveling with you.

SPLURGE SHIELD. Another MasterCard enhancement is its MasterAssist package, which covers health insurance. If you have a medical emergency while traveling abroad on business and your company doesn't cover the bill or you haven't met your deductible, MasterCard will reimburse you.

Visa stresses that its corporate cards also allows individual credit limits to be set. Visa card also provides up to \$15,000 of coverage in case a former employee goes on a charging spree. Frills and all these cards play a valuable role: They leave a paper trail. And that can lead to better managed expenses—or perhaps just fewer hours of your accountant's bill at tax season.

"Live all you can; it's a mistake not to."

—Henry James

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Collecting

HOW TO BE AN OLD BOOK'S LATEST LOVER

When a West German literary archive paid nearly \$2 million last year for the original manuscript of Franz Kafka's novel, *The Trial*, it was an unmistakable sign that the once staid and stately pastime of collecting rare books and literary artifacts had suddenly become big business.

The Kafka sale was a record for a modern literary manuscript—although maybe not for long. Other extremely rare books and manuscripts are rising sharply in value. Yet for the collector without a museum-size budget, there are surprisingly good values. "Compared to the art world, you can still get great books for minuscule sums," says Peter Kraus, president of Ursus Books, a New York shop. "In art, an equally great object would be in the millions."

Few rare books or autograph manuscripts sell for more than \$100,000, and a more common price for a relatively rare first edition is \$1,000. But don't expect rapid price increases among less expensive books and artifacts: While prices have been rising steadily, most rare books climb only modestly in value. Book dealers, many of whom are collectors themselves, therefore urge budding collectors to do it more out of love for literature



than for a potential profit.

A critical first step in starting a collection is to decide on a specific field: Literary works, art books, books with plates, illustrated books, autograph manuscripts, and incunabula (books printed before 1501) are distinct disciplines. If you have an abiding passion for a particular author, period, or genre, your collection will remain manageable.

OVERWHELMED. James Lowe, the owner of James Lowe Autographs in New York, says he was his own worst example. Lowe started his collection at age nine with a letter from Dickens. As a teenager, he branched out into limited editions of Faulkner, Hemingway, and Dylan Thomas, and he became overwhelmed. "It's extremely complicated and frustrating when you spread yourself into so many areas," Lowe says.

Faced with so many choices, he found himself unable to collect wisely. So he decided to focus on letters of people he admired, such as Washington and Lincoln. It paid off. Twenty years ago, a handwritten letter of George Washington's was worth \$350. Today the same letter might sell for \$25,000.

Once you have established a focus, find a book dealer who specializes in that subject. Dealers who have been in the trade for years have the advantage of knowing what other copies exist and how to assess a book's relative condition. They can also act as personal agents, keeping an eye out for material in your field. The Antiquarian Booksellers Association of America (50 Rockefeller Plaza, New York, N.Y. 10020) publishes a list of dealers.

Auctions of rare books and letters are becoming more common, but if you have expert knowledge, it's best not to let booksellers examine books at auction before the day of sale. This helps to avoid some of the pitfalls of the novice collector's market. A book collector will be able to tell, for instance, whether a book still has its original binding or if the pages have been washed, thus decreasing the value.

The world of rare books, manuscripts, and literary artifacts comes with its own set of mysteries. Simply because a book is extremely rare, for instance, does not mean it's worth a fortune. Marsha Malin, Sotheby's Euro-

manuscript expert, says, "when she comes up with a mate, she relies on previous sales when possible. But in the case of the Kafka manuscript, for example, there were no prior sales, so the value is predominantly guesswork. Her primary guide is *American Antiquarian Prices Current*, available from Bancroft-Parkman, Box 236, Washington, D.C. 06793. Katie H.

Worth Noting

■ **DIGITAL EFFECT.** Magnavox's "smart window" option on its new line of TVs gives you a "picture-in-picture" feature without digital technology's typically high cost. The TV uses the tuner from your VCR (you need one with the feature to work) to insert a small black-and-white picture of a second channel in the corner of the TV you're watching in color. "Smart window" can be had for an additional \$50.

■ **FUND FACTS.** The Mutual Funds Almanac from Donoghue Organization (\$26), lists expense ratios and 10-year performance figures for 2,200 funds. To order, call 800 343-5413.



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11	Gulf Oil
12	Atlantic Richfield
13	Shell Oil
14	Occidental Petroleum
15	U S Steel
16	Phillips Petroleum
17	Sun

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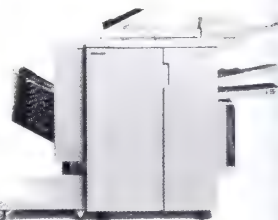
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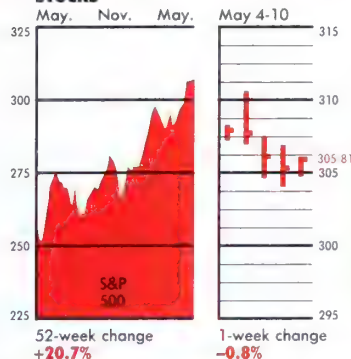
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Investment Figures of the Week

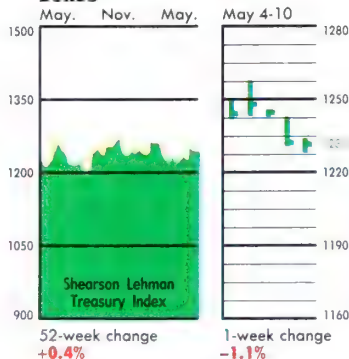
TREASURY

market gave ground
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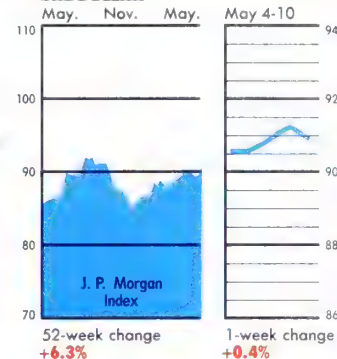
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

DOCKS

	Latest	% change Week	% change 52-week
INDUSTRIALS	2374.5	-0.8	20.8
PANIES (Russell 1000)	158.3	-3.0	17.9
COMPANIES (Russell 2000)	165.6	0.5	17.5
PANIES (Russell 3000)	174.2	-0.6	20.4

STOCKS

	Latest	% change (local currency) Week	% change (local currency) 52-week
(FINANCIAL TIMES 100)	2117.0	0.5	20.5
NIKKEI INDEX)	33,993.3	0.1	25.2
(TSE COMPOSITE)	3575.0	-0.4	10.7

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.8%	8.8%	6.4%
30-YEAR TREASURY BOND YIELD	9.1%	9.0%	9.2%
S&P 500 DIVIDEND YIELD	3.3%	3.4%	3.8%
S&P 500 PRICE/EARNINGS RATIO	12.0	12.1	13.6

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	288.4	287.2	Positive
Stocks above 26-week moving average	64.1%	65.7%	Neutral
Speculative sentiment: Put/call ratio	0.24	0.20	Negative
Insider sentiment: Vickers sell/buy ratio	1.47	1.43	Neutral

INDUSTRY GROUPS

WEEK LEADERS

	% change 4-week	% change 52-week
COMMUNICATIONS EQUIPMENT	14.0	0.5
BANKS AND LOANS	13.4	42.6
TELECOMS	12.5	13.5
BUILDING	9.5	42.7
RESTAURANTS AND MOTELS	9.2	20.9

Strongest stock in group

SCIENTIFIC ATLANTA	19.8	23.0	17 ³ / ₈
GOLDEN WEST FINANCIAL	22.7	68.0	43 ¹ / ₄
AVON	44.0	49.2	36
KAUFMAN & BROAD	19.0	28.2	12 ¹ / ₂
HOLIDAY	19.3	45.0	37 ⁷ / ₈

WEEK LAGGARDS

	% change 4-week	% change 52-week
FACTURED HOUSING	-8.5	22.4
PROPERTY-CASUALTY INSURERS	-5.0	15.7
MINING	-4.6	8.2
RAILROADS	-4.5	10.8
FINANCE BROKERS	-3.7	17.0

Weakest stock in group

SKYLINE	-11.0	21.2	17 ¹ / ₈
GENERAL RE	-6.5	28.5	62 ¹ / ₂
CONSOLIDATED FREIGHTWAYS	-11.9	11.2	29 ³ / ₄
INLAND STEEL	-10.3	10.0	37 ¹ / ₈
MARSH & McLENNAN	-4.2	20.1	59 ⁷ / ₈

MUTUAL FUNDS

TOP

4-week total return	%
MAN DEAN	13.4
TIETH CENTURY VISTA INVESTORS	11.4
IC HORIZON AGGRESSIVE GROWTH	11.3

LAGGARDS

Four-week total return	%
STRATEGIC GOLD/MINERALS	-9.2
STRATEGIC INVESTMENTS	-6.8
FIDELITY SELECT AMERICAN GOLD	-5.9

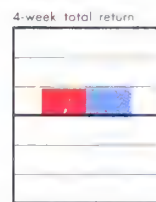
52-week total return

	%
MANN	64.4
DER CAPITAL GROWTH	42.6
EGIE-CAPPIELLO GROWTH	41.7

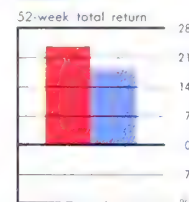
52-week total return

	%
STRATEGIC GOLD/MINERALS	-29.4
STRATEGIC INVESTMENTS	-14.1
SLH PRECIOUS METALS & MINERALS	-12.9

S&P 500



Average fund



RELATIVE PORTFOLIOS

amounts
nt the present
f \$10,000
d one year
each portfolio

ages indicate
total returns



Foreign stocks

\$12,465

-0.17%



U. S. stocks

\$12,164

-0.95%



Treasury bonds

\$10,954

-1.29%



Money market fund

\$10,673

+0.16%



Gold

\$8,494

-0.36%

in this page are as of market close Wednesday, May, 10, 1989, unless otherwise indicated.
roups include S&P 500 companies only; performance and share prices are as of market close

May, 9. Mutual fund returns are as of May, 5. Relative portfolios are valued as of May, 9. A more
detailed explanation of this page is available on request.

HDTV: FUND RESEARCH, NOT PRODUCTION

High-definition television has come to symbolize the decline in U.S. competitiveness. The technology won't come to market for years, but fears that the U.S. will lose another major trade battle have prompted a band of electronics and computer companies to ask the government for \$1.35 billion in subsidies for HDTV.

The plan, crafted by the American Electronics Assn., includes a request for \$300 million to fund HDTV research—and \$500 million in loans and another \$500 million in loan guarantees to set up production facilities to build HDTV sets. The group envisions creating an enterprise called Advanced Television Corp. to manage the loans and guide development of the technology. Since HDTV will require advanced computer chips, the electronics firms argue that it is vital for U.S. chipmakers.

The concern over HDTV and the fear of losing a new high-stakes technology market are understandable. After all, a once-proud U.S. industry has all but disappeared under the pressure of global competition. Twenty years ago, 18 U.S. companies were manufacturing TV sets. Today, Zenith Electronics Corp. is the only world-class producer remaining. With HDTV on the horizon, General Electric Co. left the business in 1987, selling off its consumer electronics units to a European competitor, Thomson. Clearly, U.S. corporate chieftains have already voted to put their capital elsewhere.

But the request for outright government production subsidies goes too far. How HDTV fares in the market will depend not on its significance to national trade policy, but on whether consumers want to buy a pricey new technology. Many estimates say early HDTV sets will cost upwards of \$3,000.

The U.S. can spur HDTV's development—and stimulate spinoffs of the new technology—by offering tax incentives and allowing joint research. But providing working capital to reluctant manufacturers and subsidizing actual HDTV production facilities is a riskier and less defensible venture. For all their importance, consumer electronics markets remain a ruthlessly competitive business, with razor-thin margins. It's hard to see how an enterprise funded by U.S. taxpayers can manage to survive where Corporate America has not.

INSURERS DON'T NEED ANTITRUST PROTECTION

Developments in antitrust law suggest it's time for Congress to begin a reexamination of the nation's rules governing competition. A May 5 decision by the California Supreme Court upheld most of Proposition 103, which, among other things, eliminated the insurance industry's exemption from the state's antitrust laws. Other states are expected to follow California's lead.

On the federal level, it is an open secret in Washington that the antitrust exemption's days are numbered. When in

1945 the U.S. Supreme Court in *U.S. vs. South-Eastern Underwriters Assn.* ruled that insurance was interstate commerce and therefore subject to U.S. antitrust law, the industry leapt into action. Congress quickly passed the McCarran-Ferguson Act, which exempts the insurance industry from much of federal antitrust law. Almost all states promptly followed suit. Sometime within the year or two, Congress figures to repeal McCarran-Ferguson. That will be a good thing, though lawmakers need to force insurance companies to exchange cost information.

There is an apparent paradox here. At the same time Congress is set to get rid of the antitrust exemption for the insurance industry, it is leaning the other way in protecting other industries. For example, antitrust immunity has already been given to research-and-development consortia by Congress, which is also considering extending immunity to companies and industries such as machine tools subject to "unfair foreign competition."

In our global economy, the only antitrust standard that matters is international competition. Those industries vulnerable to fierce foreign rivals should be given elbow room to wage battle effectively. But U.S. insurance companies have much foreign competition in their domestic markets, such as auto insurance. On this standard, there is no reason to exempt them from antitrust laws. Unless, that is, they need a helping hand to compete more effectively in markets abroad—where until now they have a minuscule presence.

DON'T BOX NORIEGA IN

Voices in the U.S. Congress and elsewhere are calling for American military intervention to oust strongman Manuel Antonio Noriega following his marginalization of the presidential election and his brutal tactics against opponents. Not only is that an outdated response, but it also is the route to a foreign policy quagmire. Intervention in Panama would be a way to throw the general a lifesaver: It would violate the Panama Canal treaty, it precludes U.S. involvement in the country's affairs, it would give Noriega an issue around which he could rally immediate support. Once embroiled, the U.S. would have little choice but to maintain a permanent occupation. Even such a move would offend Latin American leaders, who are considering expelling Panama from their Group of Eight.

Reagan Administration officials figured that loud threats, along with the big stick of economic sanctions and criminal charges in a U.S. court, would topple Noriega quickly. But Panama's economy has turned out to be resilient: The young Panamanian has been hurt, not Noriega. And the trafficking indictments have backfired. With an arrest warrant over his head, the general has little chance of leaving harbor anywhere in the world. One of the few policy options Bush now has is to drop the indictments and give Noriega a way out. It could also encourage a foreign leader to offer Noriega asylum—Spanish Prime Minister Felipe Gonzalez was once open to the idea. It may not be the most satisfactory solution, but it could help end the Panamanian impasse.

BusinessWeek



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A Bold Move In Mainframes

IBM has launched the most ambitious software project in its history. The goal: make mainframes the heart of computer networks. Will this restore Big Blue's growth?

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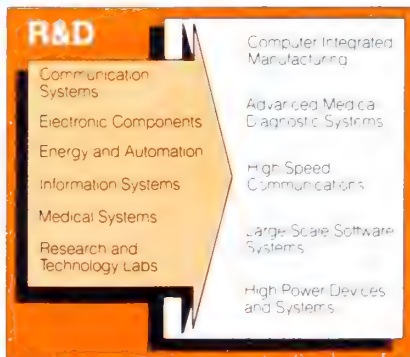
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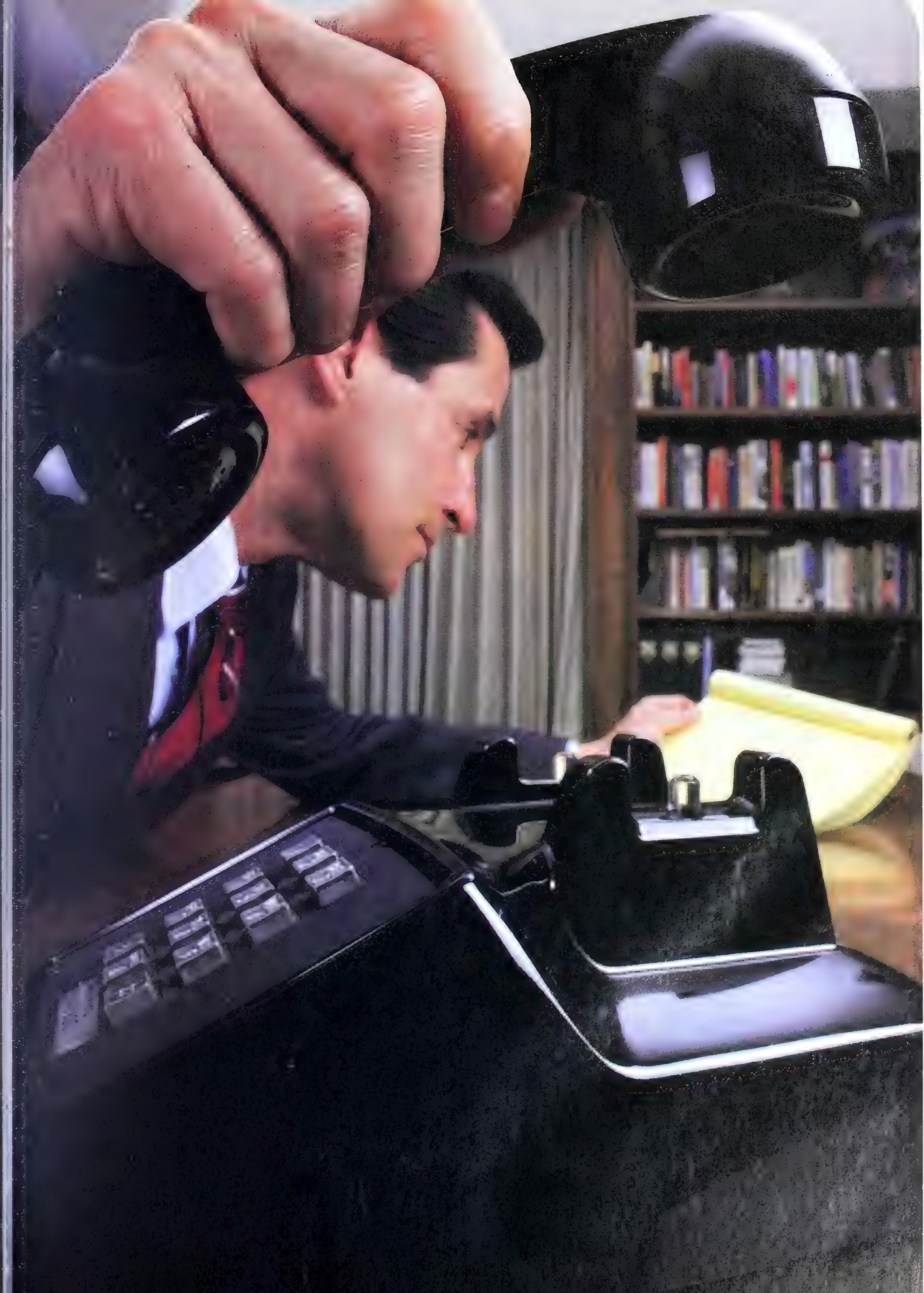
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KRAFT GENERAL FOODS' HARRELD WITH IBM SALESMAN (LEFT): NOW IBM IS SAYING, 'TELL US HOW WE CAN HELP'

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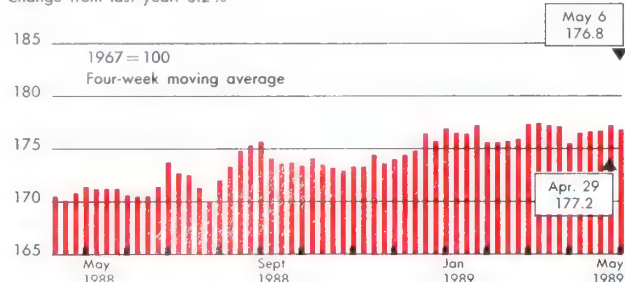
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BusinessWeek Index

PRODUCTION

Change from last week: -0.2%
Change from last year: 3.2%

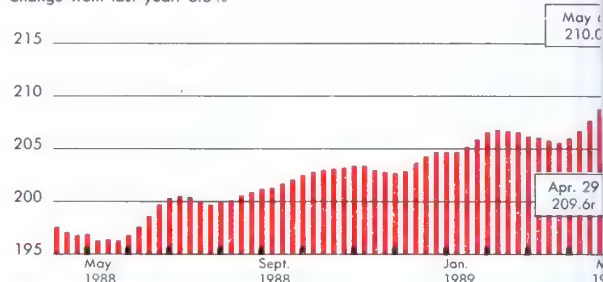


The production index fell for the week ended May 6. On a seasonally adjusted basis, output of lumber, autos, rail-freight traffic, and steel posted declines. Production of trucks, paperboard, crude-oil refining, and coal all increased slightly. Paper and electric power output were unchanged from the previous week. Prior to calculation of the four-week moving average, the index also dropped, to 176.2, from 177.7 in the preceding week.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.2%
Change from last year: 6.6%



The leading index rose slightly for the week ended May 6. Only two indicators in the latest week gave positive signals for future economic growth. These were lower bond prices and a decline in the number of business failures. On the negative side were lower stock prices and slower growth rates for materials prices, real estate loans, and M2. Before calculation of the four-week moving average, the index dropped sharply, to 209.3 from 211.0 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/13) thous. of net tons	1,955	1,974 #	-2.1
AUTOS (5/13) units	159,466	153,062r #	-5.3
TRUCKS (5/13) units	83,375	88,976r #	-1.4
ELECTRIC POWER (5/13) millions of kilowatt-hours	49,583	50,803 #	2.2
CRUDE-OIL REFINING (5/13) thous. of bbl./day	13,083	13,102r #	-1.9
COAL (5/6) thous. of net tons	18,885 #	18,667	6.4
PAPERBOARD (5/6) thous. of tons	729.6 #	726.4r	-1.9
PAPER (5/6) thous. of tons	761.0 #	754.0r	3.0
LUMBER (5/6) millions of ft.	458.4 #	491.6r	-12.0
RAIL FREIGHT (5/6) billions of ton-miles	19.7 #	20.0	2.1

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SPPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/17)	139	135	125
GERMAN MARK (5/17)	1.97	1.91	1.70
BRITISH POUND (5/17)	1.61	1.67	1.86
FRENCH FRANC (5/17)	6.68	6.44	5.75
CANADIAN DOLLAR (5/17)	1.19	1.18	1.24
SWISS FRANC (5/17)	1.76	1.69	1.42
MEXICAN PESO (5/17) ³	2,458	2,445	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/17) \$/troy oz.	371.900	377.200	-18.1
STEEL SCRAP (5/16) #1 heavy, \$/ton	115.50	116.50	2.2
FOODSTUFFS (5/15) index, 1967=100	227.6	225.6	0.0
COPPER (5/13) ¢/lb.	132.1	139.0	25.2
ALUMINUM (5/13) ¢/lb.	101.0	99.3	-12.2
WHEAT (5/13) #2 hard, \$/bu.	4.62	4.65	49.5
COTTON (5/13) strict low middling 1-1/16 in., ¢/lb.	63.08	61.70	3.2

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/12) S&P 500	307.56	308.18	1.8
CORPORATE BOND YIELD, Aaa (5/12)	9.69%	9.73%	7.4
INDUSTRIAL MATERIALS PRICES (5/12)	105.4	105.2	2.2
BUSINESS FAILURES (5/5)	214	220	3.0
REAL ESTATE LOANS (5/3) billions	\$322.2	\$321.9r	0.0
MONEY SUPPLY, M2 (5/1) billions	\$3,075.9	\$3,086.4r	2.7
INITIAL CLAIMS, UNEMPLOYMENT (4/29) thous.	290	303	7.2

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCRC seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
HOUSING STARTS (Apr.) annual rate, thous.	1,361	1,399r	-16.6
INDUSTRIAL PRODUCTION (Apr.) total index	141.1	140.5r	2.2
PRODUCER PRICE INDEX (Apr.) finished goods	113.1	112.6	6.6
RETAIL SALES (Apr.) billions	\$139.9	\$139.4r	0.0

Sources: Commerce Dept., Federal Reserve, BLS, Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/1)	\$781.7	\$786.9r	7.4
BANKS' BUSINESS LOANS (5/3)	317.5	314.4r	2.2
FREE RESERVES (5/3)	670r	-377r	3.3
NONFINANCIAL COMMERCIAL PAPER (5/3)	121.5	119.0	21.8

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (5/16)	9.76%	9.79%	7.04
PRIME (5/17)	11.50	11.50	9.00
COMMERCIAL PAPER 3-MONTH (5/16)	9.37	9.63	7.20
CERTIFICATES OF DEPOSIT 3-MONTH (5/17)	9.55	9.80	7.24
EURODOLLAR 3-MONTH (5/10)	9.85	9.89	7.34

Sources: Federal Reserve Board, First Boston

Row data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

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Performance								
Relational tests	Excellent	Poor	Poor	Very Good	Excellent	Excellent	Excellent	Very Good
Relational data entry (50)	Excellent	Poor	Very Good	Very Good	Excellent	Excellent	Excellent	Excellent
Relational reporting (75)	Excellent	Satisfactory	Good	Excellent	Excellent	Excellent	Excellent	Good
Relational querying (50)	Very Good	Good	Very Good	Excellent	Very Good	Excellent	Very Good	Very Good
Programming language (100)						Good	Good	Poor
Speed tests	Satisfactory	Good	Very Good	Satisfactory	Good	Very Good	Excellent	Good
Standard operations (50)	Good	Poor	Good	Very Good	Good	Satisfactory	Satisfactory*	Very Good*
Mixed use modes (75)	Very Good	Poor	Very Good	Excellent	Good	Excellent	Excellent	Good
Transaction modes (75)	Good	Good	Poor	Excellent	Very Good	Excellent	Excellent	Very Good
Documentation								
Ease of learning (50)	Poor	Poor	Satisfactory	Satisfactory	Excellent	Excellent	Excellent	Very Good
Ease of use								
Basic (75)	Poor	Unacceptable	Good	Excellent	Very Good	Excellent	Excellent	Very Good
Multiuser features (150)	Very Good	Poor	Poor	Excellent	Very Good	Excellent	Good	Excellent
Error handling								
Support	Satisfactory	Good	Good	Poor	Good	Very Good	Very Good	Poor
Support policies (25)	Very Good	Very Good	Satisfactory	Very Good	Good	Satisfactory	Excellent	Excellent
Technical support (50)	Good	Unacceptable	Good	Very Good	Excellent	Excellent	Excellent	Excellent
Value								
	6.8	3.5	5.4	8.3	8.1	8.9	8.5	7.8
Final scores								

InfoWorld, April 10, 1989

The bottom line is 8.9

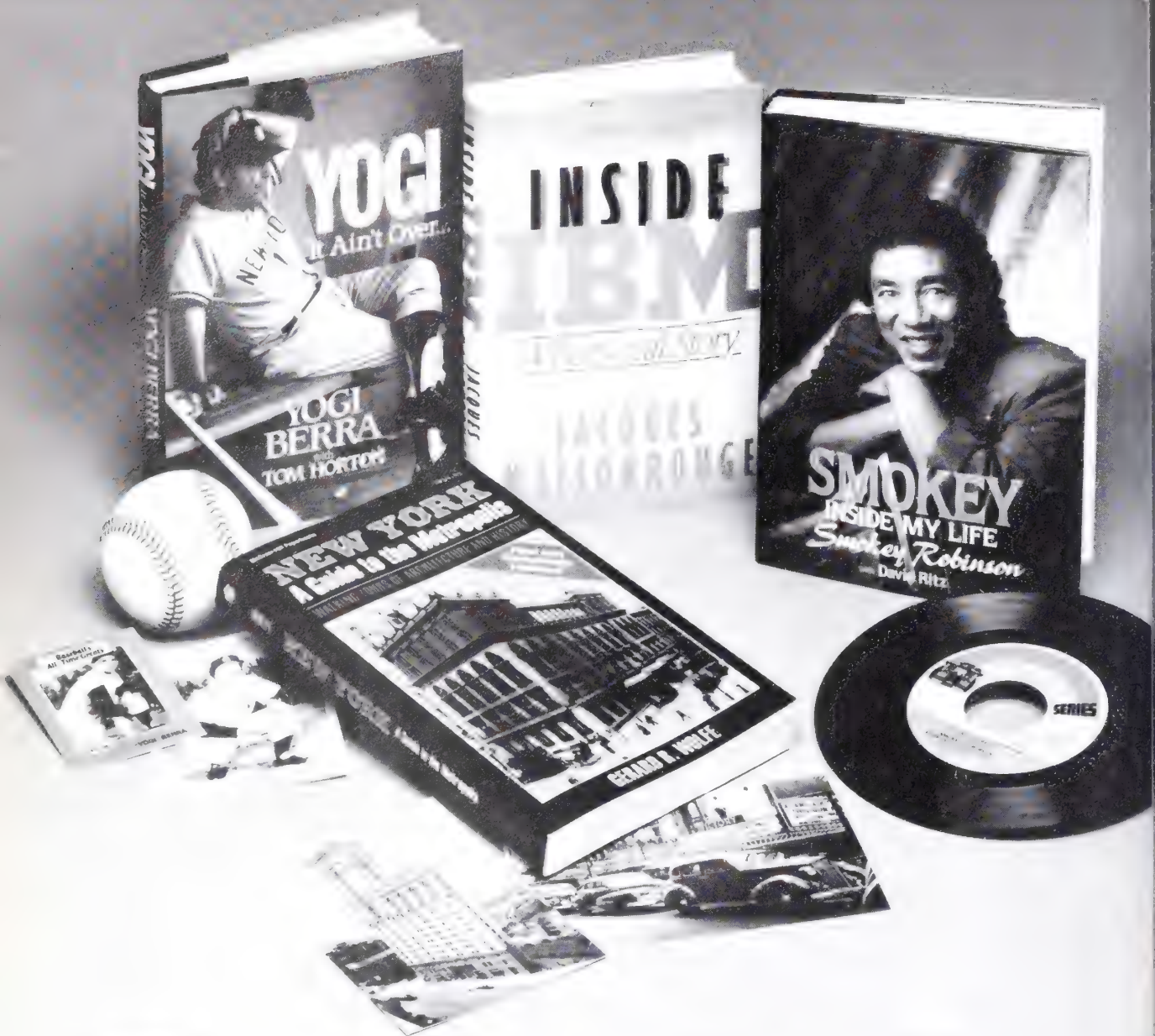
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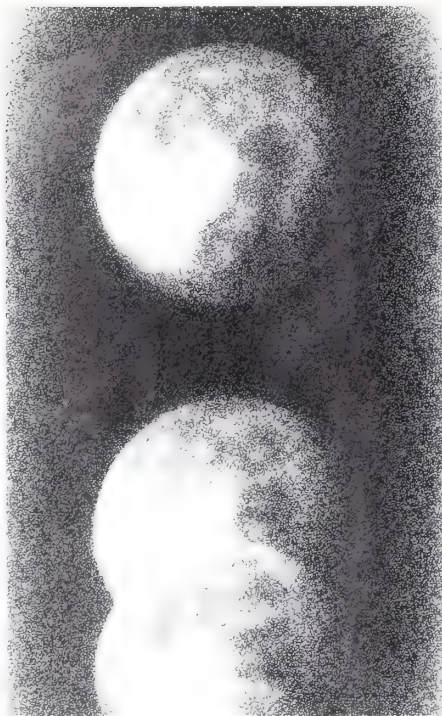




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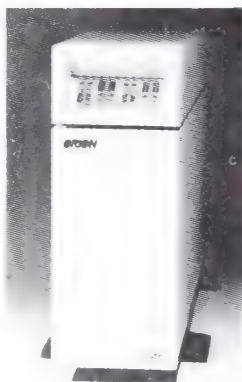


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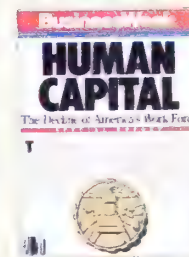
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BUSINESS WEEK'S CLASS OF '88



Over the years, BUSINESS WEEK has won numerous honors for editorial excellence—and I'm happy to report that we did very well again this time around. Eight stories we published in 1988 won, or were runners-up, in national competitions.

Markets & Investments Editor Gary Weiss won the Deadline Club Award for Public Service for two investigative stories: "Is a new scandal building on Wall Street?" (Oct. 24), on questionable practices at the Pershing Div. of Donaldson, Lufkin & Jenrette Securities Corp.; and "Did Schwab play fast and loose with its customers' shares?" (Nov. 7).

The Oct. 24 Cover Story, "Steve Jobs: Can he do it again?" won the Computer Press Award for news in a general-interest publication. Congratulations to former staffer Katie Hafner (now working on a book on computer hackers) and San Francisco Correspondent Rich Brandt. First place for a feature went to "The software trap" (May 9), Associate Editor Otis Port's Special Report on software for automation.

An eye-opening article on the problems of the nation's handicapped, "The last minority fights for its rights" (June 6), won the National Easter Seal Society Communications Award. Credit Philadelphia Bureau Chief Joe Weber.

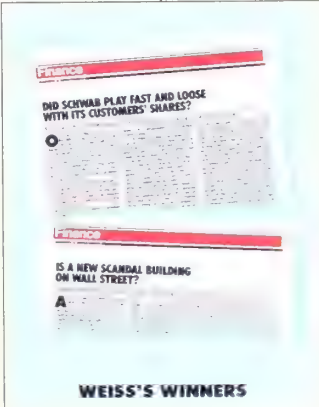
The Overseas Press Club cited two Cover Stories: "Japan's influence in America" (July 11) and "Reshaping Europe: 1992 and beyond" (Dec. 12). Correspondents from most of our 11 foreign bureaus contributed, continuing BW's tradition of distinguished international coverage.

The Sept. 12 Cover Story, "Middle managers: Are they an endangered species?" was a finalist in the Gerald Loeb Awards, sponsored by UCLA's John E. Anderson Graduate School of Management. Associate Editor John Byrne shares credit with Atlanta Bureau Chief Scott Ticer and Detroit Correspondent Wendy Zellner.

Finally, for outlining the threat that the troubled education system poses for the U.S. economy, our Special Report, "Human capital" (Sept. 19), won honorable mention in the Golden Apple Awards sponsored by New York State United Teachers. Hats off to a score of editors, led by Bruce Nussbaum, Aaron Bernstein, Liz Ehrlich, Karen Pennar, and Susan Garland.

This is an impressive list. I'm proud that BW's staff continues to bring you such award-winning stories.

Stephen B. Shepard



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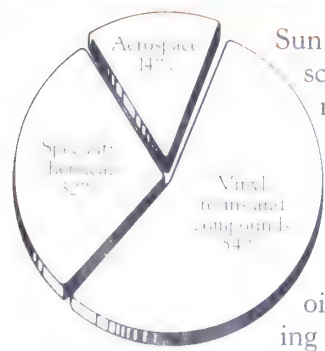
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may lead to elimination of strategic iles in the coming decade. Given the time to develop a modern aircraft n six to eight years), there will not ime to build a new bomber fleet ld the need arise. The B-1B fleet is large enough to carry out the stand- mission outlined, and therefore a re- ment for the B-52s must be built if ure to maintain a conventional weap- capability together with a platform the cruise missile.

Robert McGowan
Chandler, Ariz.

Y SOUTHERN CALIFORNIA IS RGED UP ABOUT ELECTRIC CARS

ome foggy ideas mar this clean-air plan" (Editorials, Apr. 3) graphical- describes air pollution problems in the Angeles area. But while belittling plan to have 40% of all cars burn n fuels or run on electricity by the 2007, you conveniently overlook the that in 1986, 81.6% of all air emis- s in the South Coast Air Basin origi- d from transportation.

"Request for Proposal" sponsored the Los Angeles Water & Power t., Southern California Edison, and Los Angeles City Council would e 10,000 electric vehicles on South-

CORRECTION & CLARIFICATION

The article "Blacking out bright light in a flash" (Developments to Watch, May 8) referred to welders' helmets made by "Gorvus Corp." The correct name of that company is Gor-Vue Corp.

ern California's streets by August, 1995.

[This will diversify] American energy sources and will make us less dependent on foreign petroleum and improve the nation's balance of payments.

Marvin Braude
Councilman, City of Los Angeles

FORGET PROFIT-SHARING —JUST LEND WORKERS AN EAR

Worker participation in modern industry isn't new ("Want to boost productivity? Try giving workers a say," Economic Viewpoint, Apr. 17). It's as old as W. Edwards Deming helping Japan recover from World War II. The Brookings Institution didn't need a conference to investigate the effect of profit-sharing on productivity, and the evidence is not "sketchy." Read Thomas J. Peters' *In Search of Excellence* or Richard J. Schonberger's *Japanese Manufacturing Techniques*.

Alternative pay systems don't create

productivity, and increased productivity doesn't take increased capital investment or alternative pay plans. The investment must be in time and effort to nurture employee attitudes, empowering them to make long-term industrial changes.

Forget alternative pay for employees. Just listen to them.

F. H. Sherry
Edina, Minn.

BATTLING DRUGS AT THE BANK DEPOSIT WINDOW

Regarding "Getting banks to just say 'no'" (Top of the News, Apr. 17): If two or three deposit-hungry executives of major money-center banks, operating through either their domestic offices or foreign offices, were jailed because their banks accepted drug money deposits, a very inexpensive and important battle in the "war on drugs" would be won.

Lewis N. Wolff
Wolff Sesnon Buttery
Los Angeles

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THE BOOKS OF SUMMER: AN ALL-STAR LINEUP

Every Memorial Day you make yourself the same promise: This is the summer you'll catch up on all the important new books. And every Labor Day you pack up the handful of paperbacks you grabbed at the airport or train station, wishing you'd been better organized.

Here's help—BUSINESS WEEK's guide to the best of recent and coming releases. If your goal is to leave the office behind, there's a wide selection of books from sports to sociology. And if you like your reading "relevant," there are entries proving that even another look at the budget deficit can be rewarding.

HISTORY

Forests have been decimated for books commemorating this year's bicentenni-

al of the French Revolution, but two popular histories stand out from the crowd. **Citizens** by Harvard University's Simon Schama, already a best-seller, turns conventional accounts of the revolt upside down by concentrating on the viciousness of the mobs and the virtues of the monarchy they hated. Schama argues that far from clinging to an obsolete order, France's rulers had a passion for modernism. The changes they wrought contributed greatly to the political and social turmoil that ended in so much bloodshed. Closer to the mainstream, biographer Olivier Bernier's **Words of Fire, Deeds of Blood** uses portraits of key personalities on both sides of the conflict to bring the period to life. As the title suggests, this is a vivid review of populist rhetoric, the idealism of

enlightened statesmen, and the terrorist tactics of those they inflamed.

Rather read about America? **The Crosswinds of Freedom** is the final volume of James MacGregor Burns' trilogy, *The American Experiment*. It covers the years from Roosevelt through Reagan with encyclopedic but fast-paced political and social commentary. Burns approaches U.S. history as an ongoing struggle to balance autonomy against world influence and prosperity against fairness. In taking us from 1933 to the election of George Bush, the book gives a strong sense of drama in progress.

In **American Genesis**, sociologist Thomas P. Hughes has heartening words for those who fret about U.S. competitiveness. Hughes's theory is that the century from 1870 to 1970 was the most innovative in human history. And he doesn't think American ingenuity has faded a bit.

A different kind of chronicle is **Left Stick Traces** by journalist and music critic Greil Marcus. Subtitled *A Secret History of the 20th Century*, his illustrated annals of underground movements in politics and art are highly original. Marcus assembles the doc-



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ts of cultural dissidence, from Dant poetry to rock lyrics, and comes with the notion that there may be a d of collective unconscious of re... Since he begins and ends with an rgeous British punk rock band, Sex Pistols, the idea has consider- e shock value.

LEVEL

nchair tourists can look forward to magnificent trips. **Time Among Maya** by Ronald Wright is an od-



yssey through Central America, where 5 million Maya still maintain much of their ancient culture. The Canadian author's adventures in Belize, Guatemala, and Mexico range from the mystical to the maudlin, and his prose has a gripping immediacy.

By contrast, Ian Buruma keeps the personal sentiment to a minimum in **God's Dust: A Modern Asian Journey**. Instead, he takes a hard look at the identity crises of eight Asian nations as they learn "to be modern without losing [their] cultural sense of self." Buruma is politically sophisticated and well-versed in Asian history. His dispassionate picture may be an eye-opener to anyone who still romanticizes the "exotic" East.

PEOPLE

In place of blockbuster biographies are a number of books that use famous lives to typify a place and time. **The Vanderbilt Era**, by the prolific Louis Auchincloss, is a group portrait of the big spenders who dominated the American plutocracy in the decades before World War I. Similarly, in **Otto the Magnificent**, biographer John Kobler turns the life of Otto Kahn, the immigrant financier who became a high-powered investment banker and arts



patron, into a saga of America's gilded age. If the U.S. had a renaissance, these were its Medicis; and the authors have a good time showing how a handful of families, hell-bent on leaving a mark with their money, sometimes succeeded all too well.

The fascinating **Chaplin and American Culture**, by film scholar Charles J. Maland, traces the love-hate relationship between a star and his public. Readers who are not daunted by Maland's academic approach will learn as much about American prejudices and politics as about the exile clown's persona on and off the screen. Another legendary figure, the enigmatic "Lawrence of Arabia," speaks in his own voice in **T. E. Lawrence: The Selected Letters**, edited by Malcolm Brown. The 30-year correspondence is

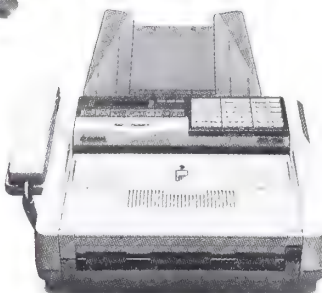


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likely to end much speculation about his military exploits, espionage career, and private life. Finally, the 18 profiles in John Hersey's **Life Sketches** add up to a journalistic tour de force. The personalities range from John F. Kennedy to an illiterate Army private, the dates from 1944 to 1988. Hersey based each sketch on personal encounters with his subjects, and the book represents a career's worth of new and brilliant writing.

BASEBALL

Baseball lovers are in for two treats. Journalist David Halberstam's **Summer of '49** (BW—May 22), uses the 1949 Yankees-Red Sox playoffs as a starting point for a nostalgic tribute to



postwar America. Baseball fans will enjoy his close coverage of the games, and Halberstam fans will relish his discussions of the days before sports and business became as closely entwined as they are now.

The Progress of the Seasons by novelist George V. Higgins evokes the same period, but in a much more personal tone. Covering 40 years of Red Sox history, the book is a paean to Fenway Park and to the profound effect that baseball and its heroes once had on little boys—especially in Boston, but probably all over the country.

SCIENCE

Science buffs who weren't quite up to James Gleick's *Chaos* last year can indulge their passion for particles with a very accessible alternative. In **Turbulent Mirror**, authors John Briggs and F. David Peat show how random phenomena can suddenly turn predictable—and vice-versa. And they suggest that "chaos theory" might help explain events as diverse as the stock market crash of October, 1987, and persistent traffic jams.

For those more biologically inclined, **Blueprints: Solving the Mystery of Evolution** by Maitland A. Edey

and Donald C. Johanson is a super-readable history of genetic theory, from Darwin to modern DNA research. The authors are famous for *Lucy*, the account of the 3 million-year-old hominid skeleton Johanson found in Ethiopia, and they know how to tell a story.

BUSINESS

Business books this season run the gamut from macroeconomics to management. From Robert Heilbroner and Peter Bernstein comes a slim volume, **The Debt and the Deficit: False Alarms/Real Possibilities**, that clears away much confusion and dispels many popular myths. If Americans are going to worry about living beyond their means, suggest the authors, they had better be worrying for the right reasons. No, deficits are not about to bring the economy tumbling down. In fact, they may continue to be engines of growth. But debt must be managed to be constructive, and this book is a primer on such responsible management.

The Invisible Powers by John J. Clancy, a computer-industry veteran who now runs software startup Valisys, examines the images that companies use to describe their goals and strategies. Clancy draws on an unusual mix of material, much of it linguistic, to describe how corporations are perceived, how they motivate their employees, and how they approach problem-solving. Arguing that the metaphors currently in use are fast becoming obsolete, he urges business leaders to rethink corporate culture—or risk extinction.

Two first-person narratives take intimate looks at a couple of companies that have nothing in common except enormous wealth and clout. **Inside IBM: A Personal Story** by Jacques Maisonrouge is a cheerful account of the computer giant's global expansion, from the first non-American to serve on its board of directors. Maisonrouge's optimism is largely the result of his own success in the company, and even readers not particularly interested in IBM may be inspired by his story. Coming from the opposite direction is Patrick Reynolds' **The Gilded Leaf: Triumph, Tragedy, and Tobacco**. The antismoking black sheep of the R. J. Reynolds dynasty rips into his family with all the passion one would expect from a disinherited heir. Almost incidentally, he produces a lively corporate history that may make some folks at Kohlberg Kravis Roberts & Co. wonder just what they have gotten themselves into.

Esquire columnist Stanley Bing may

have the last word in summer business reading. His **Biz Words**, a paperback not much bigger than a memo pad, is a lexicon of corporate jargon that's really an ethics guide in disguise. Brief essays on such office practices as back-stabbing, passing the buck, and sexual harassment offer excellent advice. But Bing's book is better than wise—it's hilarious.

FICTION

The news in novels: John le Carré brings the superpower spy story into the age of *glasnost* in **The Russian House**. Complete with post-Cold War romance, this thriller suggests—without being in the least preachy—how dangerous it may be to hold on to meaningless stereotypes and unfounded mistrust. In **Polar Star**, Marc Cruz Smith's sequel to *Gorky Park*, U.S.-Soviet fishing venture in the Bering Strait turns into a murder conspiracy that blurs the classic ideological lines. Detective Arkady is as cynical as ever, always finding equal measures of stupidity and cunning on both



sides of the Russian-American contest.

An absorbing coming-of-age novel by John B. Schwartz, **Bicycle Day**, describes the adventures of a young man who spends a year working for a U.S. computer company in Tokyo. In trying to master Japanese manners, the hero winds up making more progress on the path to self-knowledge and self-control than he possibly could have back home. And those who worry that they never read every word of *War and Peace* can assuage their guilt with a new book of stories by Tolstoy's grandniece, Tatyana Tolstaya. Already much admired in the Soviet Union, she makes her U.S. literary debut with **On the Golden Porch**, a witty collection that is translated with style.

BY JOAN WARNER

Assistant Copy Chief Warner is currently editing the Books section.

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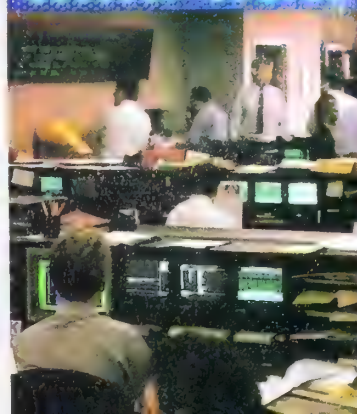
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A TALE OF TWO COUNTRIES: WHY CHILE BOOMS AS PERU SWOONS

BY PAUL CRAIG ROBERTS



In Santiago, businesses sprout daily, and unemployment is down to 5.9%. But in Lima, businesses are folding in record numbers, and the newly poor are too numerous to count

Peru, under democratic rule since 1980, is on the verge of economic collapse. Chile, shackled for years with a dictatorship, is an economic success story. Yet, Peru's failures are not those of democracy, and Chile's successes not those of dictatorship. While Peru has fought individual initiative with socialization and bureaucracy, Chile has harnessed the market economy, partly by encouraging individual incentives.

Last year, Chile's real gross national product expanded by 7.3%, while the Peruvian economy contracted by 7.5%. Santiago, the Chilean capital, is experiencing a construction boom comparable to the Washington metropolitan area, while one needs eagle eyes to spot new construction in Lima.

New businesses sprout daily in Chile; in Peru, established businesses are folding in record numbers. From September to March, Peru lost more than 500,000 jobs. According to estimates by economist Roberto Abusada in the news magazine *Caretas*, Peruvian production fell 25% during that period. In contrast, Chilean unemployment fell to a new low of 5.9%, a world-class performance.

Chile has built up thriving manufacturing and agricultural sectors, reducing the proportion of its exports obtained from the mining sector to 40%. Endowed with a resource base similar to Chile's, Peru has neither diversified its economy nor maintained earlier levels of production of its traditional exports. Strikes bog down the mining sector in Peru, accounting for about half of exports. Traditionally a leader in the export of fish and fish products, Peru has been surpassed by Chile by a ratio of 2 to 1.

CREATING CONVERTS. In Peru, the moneyed class is exiting en masse, taking their remaining capital to Miami, Los Angeles, or—in a new twist—to Santiago. Chile, however, has attracted \$2.4 billion in flight capital back home. A class of newly rich has emerged in Chile, while Peru's newly poor are countless.

The failing Peruvian economy is creating new converts among the hungry masses to the Maoist terrorist group *Sendero Luminoso* ("Shining Path"). Terrorists bomb targets and kill government officials with regularity. Crime is rampant in Lima, with thieves and muggers taking over the streets. Inflation is at hyperinflation levels of 7,000% a year. Predictions of civil war or a military coup are on everyone's lips.

Peru's 270 government-owned companies gobble up half the nation's budget. Worse, the poor end up paying the price for inefficient state-owned monopolies: The Peruvian government prints money to pay public salaries, causing the hyperinflation that hits the poor hardest.

Peruvians take little solace in the fact that they enjoy more political liberties than do Chileans, who after all live under a regime with a repressive human rights record. Instead, they openly envy Chileans' economic freedoms. In Chile, business can be registered in a day and money invested without fear of government confiscation, but Peruvians must wend their way through government monopolies and restrictions that force many legitimate businesses to operate in the underground, if at all. Hernando Soto, former managing director of Peru's Central Reserve Bank, reports in his book, *The Other Path*, that it took 289 days of wading through red tape and \$1,231 in bribes—32 times the monthly minimum wage—to legally set up a small garment factory in Lima.

BANK CONTROLS. Chilean strongman Augusto Pinochet has protected private property rights with constitutional reforms designed to outlast his rule. The central bank of Chile is prohibited from lending money to the government under any circumstances other than a state of war, thus preventing Santiago from financing budget deficits by printing money. Consequently, Chilean inflation is 12% a year, low for the region.

While Peru built up the state sector, Pinochet took on the entrenched Chilean bureaucracy and won. Since 1973, hundreds of state companies have been privatized and encouraged to compete against state enterprises. The national pension system was privatized, and today about 70% of the pension systems in private hands and funded with stock ownership, thus creating a popular resistance to renewed socialization.

Their livelihoods disappearing, Peruvians are increasingly aware of Chile's success. Recently, a Peruvian diplomat in Washington was fired for articulating the view that Peru needs a Pinochet. Yet many Peruvians openly bemoan the absence of a similar figure within the military to rescue the country from a cataclysmic decline.

The experience of these two countries demonstrates that the region's problem is the bloated size of government, and the external debt. Peru is failing despite not making a payment on its foreign debt since 1986. The country has accumulated arrears of about \$10 billion on its \$18 billion debt. Chile enjoys high growth even though the country meets its foreign debt obligations, last year paying \$2.3 billion in principal and interest on its \$18 billion debt.

If Latin America is to avoid economic decline, the U.S. government and multilateral institutions we support must begin to stress the importance of economic as well as political freedom.

PAUL CRAIG ROBERTS HOLDS THE WILLIAM E. SIMON CHAIR OF POLITICAL ECONOMY AT THE CENTER FOR STRATEGIC & INTERNATIONAL STUDIES IN WASHINGTON

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Economic Trends

BY GENE KORETZ

A TAX WINDFALL COULD HELP PARE THE DEFICIT . . .

An unexpected surge in personal income tax receipts around the Apr. 15 payment date could help lower the government's fiscal 1989 budget deficit. Basing her estimates on weekly Treasury Dept. reports for April and early May, economist Kathleen Stephansen of Donaldson, Lufkin & Jenrette Securities Corp. figures that total nonwithheld personal tax revenues for the two months will come in about \$18 billion over last year—and some \$14 billion above projections. Most of the extra money was the result of higher final tax payments and lower refunds than anticipated for the 1988 tax year. And it was not foreshadowed by the estimated payments individuals made last year.

The pickup in receipts is comparable to the \$17 billion windfall the Treasury received in 1987 after taxpayers rushed to take advantage of expiring low capital-gains tax rates in 1986. But until the Treasury can analyze tax returns, the source of the cash will remain a mystery. As one private analyst puts it: "Either the effective tax rate is higher than anticipated by tax reform or some kind of income was higher than estimated."

The situation illustrates the uncertainties surrounding complex tax changes. The 1986 Tax Reform Act was supposed to be revenue-neutral, with a rise in corporate taxes offsetting a cut in individual tax liabilities. But thus far, corporate tax payments have fallen short of projections, whereas personal income tax revenues have outpaced them.

With Howard Gleckman in Washington

. . . AND SINKING RATES MIGHT CHOP IT EVEN MORE

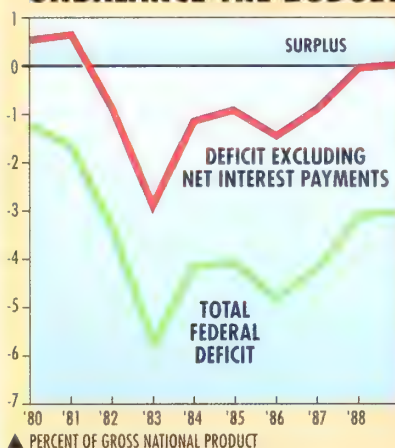
Whatever the short-run budget outlook, economist Arnold X. Moskowitz of Dean Witter Reynolds Inc. believes that efforts to reduce the deficit have already passed a watershed that promises to produce a significant decline in long-term interest rates in the years ahead. While the total budget deficit is still historically high for the postwar period, he points out that the picture looks a lot more promising if you exclude net interest payments from budget calculations. In fact, government outlays excluding interest have now

been brought into balance with revenues (chart). "Barring a recession and assuming continued action to trim the deficit," says Moskowitz, "I expect the interest-adjusted budget to move into surplus next year and to start to exert a positive effect on bond prices."

Moskowitz focuses on the budget position excluding interest payments for two reasons. The first is that "most interest payments are saved and reinvested, so that borrowing to pay interest on the debt has a different impact on the credit markets than borrowing to cover other costs." In other words, an interest-only deficit can be largely self-financing if investors choose to take their interest income from government securities and reinvest it in government debt.

Secondly, interest payments are high-

HOW INTEREST OUTLAYS UNBALANCE THE BUDGET



DATA: TREASURY DEPT., DEAN WITTER REYNOLDS INC.

ly sensitive to changes in interest rates, so that a protracted decline in rates can significantly cut the deficit. Moskowitz notes that although government bond rates have historically run between 2% and 2.5% after adjustment for inflation, they are now at about 5%—their highest level in 50 years. And he predicts that these "clearly excessive" rates, which he feels are related to inflation fears generated by continued large deficits, will start to decline as the economy slows in response to monetary restraint.

More important, Moskowitz believes that several long-term developments are creating a low-inflation environment that will extend the coming cyclical decline in rates. Currency accords and deregulated financial markets now tend to force U.S. and foreign monetary authorities to dampen inflationary pressures, for example. And global competition is keeping a lid on price hikes, while changing demographics are favoring saving over consumption. In light of these trends,

Moskowitz is forecasting that long-term rates could drop by as much as 2½ percentage points within the next three years—producing both a handsome return for bond investors and a "permanent" \$70 billion drop in the budget deficit.

HAS THE ECONOMY'S MAIN ENGINE MOVED TO THE MIDWEST?

It's hardly news that the long-oppressed industrial heartland of the nation has been staging something of a comeback in recent years. But now the Midwest region's performance is being heightened by sluggish business activity on the East and West coasts, which were the economy's hot spots earlier in the expansion. The Federal Reserve's latest survey of business conditions around the nation, for example, cites evidence that consumer spending has slowed in the Northeast and West and "that the economic expansion has been stronger lately in the South and Midwest than elsewhere in the country."

Economist Edward Yardeni of Prudential-Bache Securities Inc. contends that "several industries concentrated on the two coasts—including defense, financial markets, and retailers and restaurants catering to yuppies—are currently experiencing moderate recessions." But even though auto sales are down from last year, he doesn't see the coastal economic malaise spreading to the nation's midsection. Instead, he thinks auto sales will level off and that export demand and capital spending will bolster Midwest manufacturers enough "to keep the overall economy growing even if the coastal economy slips into recession."

PERHAPS APRIL FOOLED THE ANALYSTS

Take April's sluggish retail sales and employment reports with a grain of salt, advises economist Edward S. Hyman Jr. of C. J. Lawrence, Morgan Grenfell Inc. He notes that the automotive component of retail sales was up only 1.1% in April, whereas car auto sales during the month rose 13.5%—the largest disparity between two series in more than seven years. What's more, weekly unemployment insurance claims declined steadily during April. "Rather than slowing further, the economy may actually be strengthening," concludes Hyman.

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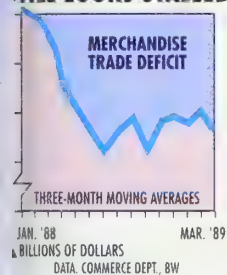
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THE EXPANSION'S LONG RUN MAY WELL SLOW TO A STEADY WALK

Unlike most of its predecessors, this 6½-year economic expansion has often defied traditional analysis. It just might do it again. A "soft landing" is not traditional in business-cycle history—but this time could be different.

That's the Federal Reserve Board's goal. It wants to see the economy's growth rate glide down smoothly to a noninflationary pace, keeping the expansion going and eliminating the need for further credit tightening. In that way, the economy could avoid the more traditional end to expansion: a recession.

TRADE IMPROVEMENT STILL LOOKS STALLED



That gave the Fed plenty to mull over at its policy meeting on May 16, when it tried to decide just how to make the soft landing happen. For now, the Fed will likely choose to do nothing—happy that its earlier efforts are starting to show success, but waiting for further signs that policy is on the right track.

THE DOLLAR IS HURTING EXPORT GROWTH

In the meantime, the Fed faces a dilemma: Past tightening and higher interest rates may be cooling down the economy, but they are also strengthening the dollar. This threatens future improvement in the trade deficit, as well as the dollar's continued stability (page 26).

The trade deficit did narrow considerably in March, to \$8.9 billion. And the Commerce Dept. revised the February deficit to \$9.8 billion, from \$10.5 billion, making the first-quarter improvement look even better. Rising exports, up 7.4% in March to a record \$30.8 billion, accounted for all of the March improvement. Imports continued to wash ashore. They rose 3%, to \$39.6 billion.

Despite the narrowing in March, improvement in the trade gap since last summer remains essentially stalled, as shown by a three-month moving average (chart). And it might stay that way: The dollar surged on the March trade news. That will further erode the competitiveness of U.S. exports and make imports more attractive.

However, the stronger dollar has also become the

Washington's latest batch of economic data does look favorable. April numbers show that retail sales are cooling off. Housing continues to lose ground. And the pace of industrial production has slowed, loosening up capacity. But most important, there are hints that price pressures, at least in the earlier stages of goods processing, are starting to abate.

Fed's ally in its effort to slow down the economy. Despite the big export gain in March, export growth has slowed sharply, partly reflecting the dollar's strength since last summer. And that has helped cool off the manufacturing sector. Industrial production, up 0.4% in April, is still healthy, but its pace is more modest.

Output in manufacturing rose at a 3% annual rate in the first quarter, down from 5.1% in the fourth quarter and 7.1% in the third. Even if gains in May and June match the April increase, output in the second quarter will grow at only about the same rate as in the first.

A SLOWER PACE FOR FACTORY OUTPUT

The impact of slower exports on manufacturing output is unmistakable. Among final products, output of business equipment, up 0.5% in April, has begun to slow down. That partly reflects the recent weakness in capital-goods exports. Despite an 8.4% rise in March, exports of capital goods in the first quarter were still below their fourth-quarter level. Domestic weakness in housing has hit output of construction supplies, down 0.3% in April.

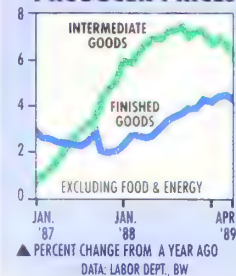
But the sharpest production slowdown is in the huge materials sector, some 42% of industrial output. That sector, which is very sensitive to movements in the dollar, was a big beneficiary of the export boom. But since last summer the growth of exports of industrial materials and supplies has dropped dramatically. Consequently, materials output during the past six months has risen at only a 1.1% annual rate, down sharply from a 6.4% pace during the previous half year.

The slower pace of production has eased capacity pressures, most notably in the earlier stages of processing. The rate of capacity use for all industry rose slightly in April, to 83.9%, and the rate for manufacturing edged up to 84%. But the factory rate is still well below its January peak of 84.7%.

Moreover, operating rates in primary processing have fallen sharply. Capacity use there slipped further in April, to 86.8%, or 1.6 percentage points below its January peak. And that means inflationary pressures on goods prices may be subsiding.

The April report on producer prices supports that notion. It shows that inflation at the earlier stages of processing, where price pressure had been greatest, is starting to ease (chart). Producer prices of finished

LESS HEAT UNDER PRODUCER PRICES



goods rose 0.4% in April. Lower prices for food and cars, the latter a result of Detroit's sales incentives, offset a 7.2% surge in energy prices. Excluding food and energy, prices for finished goods actually fell 0.1%.

That drop may not have been a fluke. Prices of intermediate goods, excluding food and energy, were unchanged in April. Consistent with other industrial data, prices for durable manufacturing materials fell broadly, down 1.3%, in a sharp reversal from recent months. This is the latest sign that prices of intermediate goods will be exerting less pressure on finished goods prices.

But this is only a glimmer of sunshine. Consumer price inflation still has plenty of vigor. Prices of services, not included in producer prices, are still rising rapidly, and the large increases in finished-goods prices in January and February have not yet reached consumers.

HOUSING STARTS ARE IN THE CELLAR

That's why a cooler pace of consumer spending is the Fed's best hope for a soft landing. So far consumers seem to be cooperating. In April, retail sales rose a moderate 0.4%, to \$139.9 billion. That wasn't enough to reverse the flatness in March and a 0.4% decline in February, so sales are still below their January level.

Moreover, higher prices accounted for most of the April gain. Adjusted for prices, sales probably fell, continuing a downtrend started last December (chart). Inflation-adjusted sales began the second quarter about 3% below their first-quarter average, at an annual rate.

In April, auto dealers used a barrage of incentive plans to post a healthy 1.1% sales gain, following three months of decline. Spending was also strong at department stores, up 1%; gasoline stations, with a 2.2% rise; and apparel stores, where receipts increased 3.6%. In the case of gas stations and clothing stores, higher prices accounted for much—but not all—of the gains.

Retail sales were weakest in housing-related areas of home furnishings and building materials, as rising mort-

gage rates and home prices choked off housing demand.

Housing starts fell 2.7% in April, following a 4.5% drop in March. At an annual rate of just 1.36 million in April, starts are at their lowest since December, 1982, when the economy was coming out of recession. Homebuilding has fallen off significantly in all geographic regions.

Housing's weakness is likely to continue. Since retail sales of furniture, appliances, and other home goods account for about 17% of all goods purchases, overall real consumer spending may not regain the momentum that powered the economy in past years.

That makes inventories an important area for businesses to watch. So far companies have been keeping their stockpiles lean. In March, inventories at factories, wholesalers, and retailers advanced by a small 0.3%, to \$765.6 billion. Because business sales were flat for the month, the ratio of inventories to sales rose slightly. Still, the ratio remains low, indicating inventories aren't out of line with demand.

Inventory problems at car dealerships, however, drove auto makers to reinstate financing deals in April. Thanks to that sales boost, dealers pared inventories to a 69-day supply at the end of April, from a high 77-day supply in March. In early May, new domestically made cars sold at a 7.4 million rate, about the same as April's 7.5 million rate, and that whittled down supplies even more.

Still, with incentives so generous, car buying has been disappointing, and it's likely to stay that way, along with housing demand. Continued softness in those two vital sectors, on top of a manufacturing slowdown, means the Fed will have to walk the economy along a fine line between recession and a soft landing. But if price pressures continue to ease, the Fed just might luck out.

CONSUMERS AREN'T IN A SHOPPING MOOD



THE WEEK AHEAD

DURABLE GOODS ORDERS

Tuesday, May 23, 8:30 a.m.

Durable goods orders probably increased 1% in April. A drop in defense orders should offset gains in other hard-goods bookings. New orders for aircraft and autos should be particularly strong. Durable goods orders rose 0.9% in March, but they plunged in both January and February. The expected April gain suggests that production in durable goods manufacturing should remain healthy in the second quarter.

GROSS NATIONAL PRODUCT (REVISION)

Thursday, May 25, 8:30 a.m.

The Commerce Dept. will probably revise the economy's first-quarter growth

rate up from the preliminary 5.5% annual rate, possibly to about a 6% pace. The rebound from last year's drought added 2.5% to the annual growth rate of GNP in the first quarter, and that figure should not change. But improvement in the foreign trade deficit was greater than first thought, and the gain in nonresidential construction may well be revised upward. So in the first quarter the non-farm economy likely expanded by at least 3.5%, at an annual rate, compared with the 3% clip previously reported.

PERSONAL INCOME

Friday, May 26, 10 a.m.

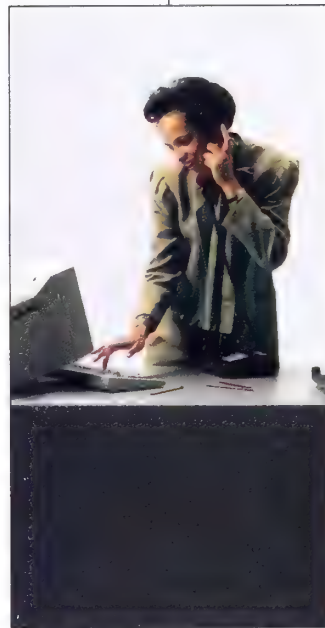
Personal income likely grew by 0.7% in April. The gains in the workweek, jobs, and wages suggest that wages and sala-

ry disbursements increased by about 0.7%. Interest income also rose strongly. A drop in farm subsidies, however, will offset some of these gains. In March, personal income advanced 0.8%.

CONSUMER SPENDING

Friday, May 26, 10 a.m.

Consumers probably increased their spending by a strong 0.7% in April, reversing the weakness of recent months. Spending had risen by 0.5% in February and just 0.2% in March. Purchases of new cars should increase by at least 10%, fueling much of the overall gain. Spending on nondurable goods and services probably also rose. However, purchases of durable goods other than cars likely were weak in April.



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THE DOLLAR COMES ROARING BACK

WASHINGTON ISN'T WORRIED YET—AND MANY ECONOMISTS ARE APPLAUDING

For the first time in four years, the world of big money is going gaga over the dollar. Putting aside lingering worries about the U.S. budget and trade deficits, international investors and foreign-exchange traders from Tokyo to London to New York are scrambling to buy dollar-denominated stocks, bonds, and other assets, pushing up the long-beleaguered greenback by 8% against the West German mark and Japanese yen in a matter of weeks. With the dollar at its highest level since 1986 and the Federal Reserve and Bush Administration still undisturbed by the dollar's rise, traders expect the currency to gain an additional 10% or more in the weeks ahead. "Demand for dollars is tremendous," says Liliانا Nealon, a Union Bank of Switzerland vice-president.

Traders attribute the dollar's gains to a host of rapidly converging factors, some of them economic and many of them political. But for now, the rising dollar can only help the Federal Reserve's tight-money campaign to cool inflation and slow the economy. A higher dollar should keep import costs down. And that may prompt domestic competitors to think twice about their own plans for price hikes. It could also give a breather to such export industries as chemicals and paper, where plants already are running full tilt. "Thanks to the stronger dollar," observes Allen Sinai of Boston Co. Economic Advisers Inc., "the Fed doesn't have to work as hard." Sinai adds that merely stabilizing the dollar at its current level, around 1.97 marks and 139 yen as of May 17, will cut two percentage points off the U.S. inflation rate by 1991.

NO DAMAGE. Washington policymakers see the dollar recovery as the closest thing to a free lunch anyone could want. And while some economists and Fed officials say that further gains in the dollar's value may cause the U.S. trade deficit to balloon again someday, none see that as a near-term threat. For one thing, unless the Fed does an about-face

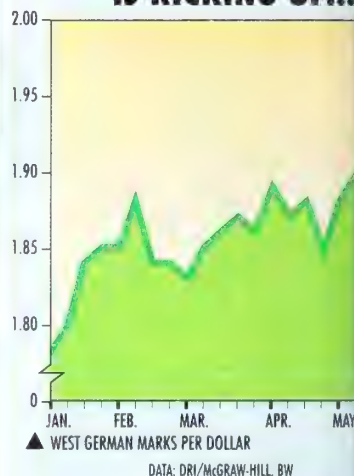
and lets interest rates fall—something Fed insiders see as highly unlikely—the slowing economy may restrain imports and keep the trade deficit from worsening. And while the dollar has moved outside the range that the U.S. and its allies are believed to have established months ago, the rebound probably isn't anywhere near strong enough to damage exports yet: In March, the U.S. trade deficit shrank to \$8.9 billion, down 10% from February.

The dollar's rise hasn't shaken many corporate executives either. "We just had a meeting of our group managers, and the dollar never came up," says Charles R. Campbell, chief financial officer at Federal Signal Corp., an exporter of fire trucks. And Eaton Corp. Chief Economist Adrian T. Dillon figures that since the dollar is 10% to 15% lower than it was a year ago against many developing countries' currencies, the U.S. still is "probably better off on the outlook for exports" to those nations.

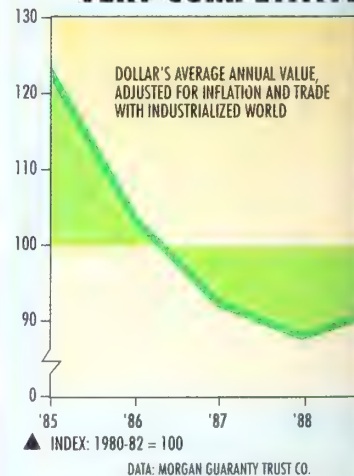
TORRID PACE. The dollar remains pretty weak against the industrial world's currencies, too. Morgan Guaranty Trust Co. estimates that after accounting for inflation and U.S. trade flows, the dollar is still 25% below its 1985 peak (chart). Says Fed Governor H. Robert Heller: "I don't think we're in a danger zone. You can't say that we've crossed a line where America is no longer competitive."

Even if the Fed and the Administration wanted the dollar to reverse course, its underpinnings are now so strong that the most forceful government jawboning might have little effect. In tactics probably aimed at slowing, rather than stopping, the dollar's advances, big central banks have repeatedly sold greenbacks on foreign-exchange markets. But many traders scorn such efforts as open invitations to buy the currency before it rises yet again. In fact, while traders and money managers have often used past rounds of central-bank intervention in order to speculate on the dollar, this time they see many more substantive

THE DOLLAR IS KICKING UP...



...BUT IT'S STILL VERY COMPETITIVE



ons to buy the buck. Among them:
■ Tight money. With the Fed refusing to
 e up on interest rates, U.S. money-
 ly growth has been held to 2.2% for
 ar. But in Germany and Japan, mon-
 is growing at a torrid 9% pace.
 ere are fewer dollars sloshing
 and the world," says Michael R. Ro-
 berg, manager of international fixed-
 ime research at Merrill Lynch Capital
 kets. With wholesale prices rising at
 a 6.5% annual rate, Germany's
 Bundesbank has been raising in-
 terest rates. But such moves
 haven't halted the dollar. And

the Bank of Japan, afraid of harming
 capital investment and of throwing high-
 ly leveraged stock and real estate mar-
 kets into a tailspin, has also done little to
 keep the yen from falling.

■ **Political jitters.** In Japan and Germa-
 ny, a growing feeling that no one is in
 charge has investors on edge. Tokyo is
 in political gridlock, as the Liberal Dem-
 ocratic Party struggles to find a succes-
 sor to Prime Minister Noboru Takeshita,
 who announced his resignation in April
 amid a major influence-peddling scandal.
 Moreover, Bank of Japan Governor Sato-
 shi Sumita may quit by summer in a

personnel reshuffle. In Bonn, support
 for German Chancellor Helmut Kohl's
 center-right government is at a low ebb.
 Investors fear Kohl's coalition may be
 replaced next year by a "red-green" alli-
 ance of socialists and environmentalists.
 And they dislike Kohl's fiscal stand.
 Some \$44 billion last year flooded out of
 Germany to avoid a new withholding
 tax. Kohl is scrapping the levy in July.
 But little cash is expected to return.

■ **Investment flows.** Many foreign inves-
 tors think the U.S. economy soon will be
 weak enough to permit the Fed to nudge
 interest rates lower. But they don't want
 to wait for the Fed to act. With the
 dollar and U.S. bonds and stock prices
 all on an upswing, foreign money man-
 agers are getting worried that they will
 lose a chance to reap hefty capital gains
 unless they jump in now (page 92). The

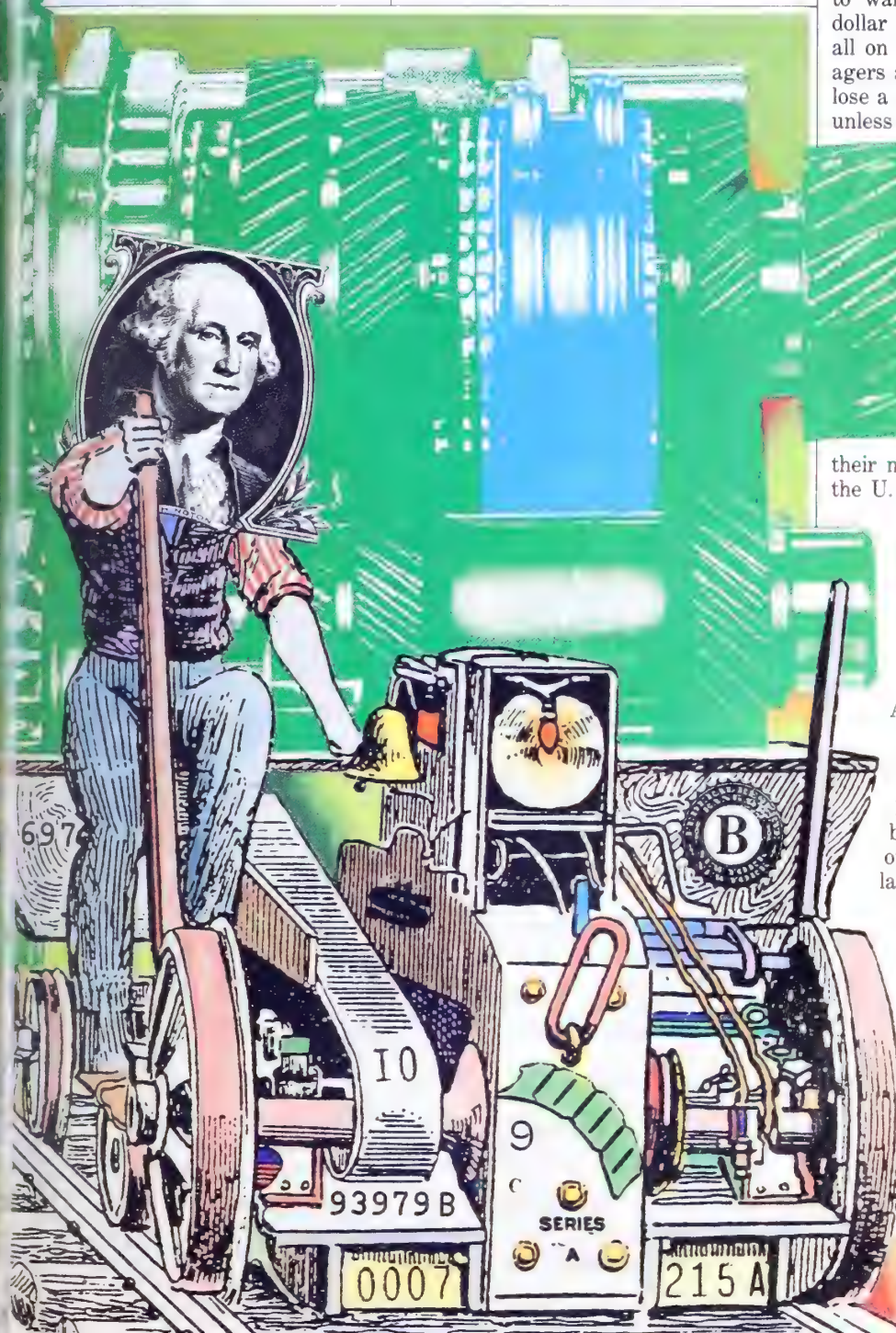
rush to buy financial as-
 sets appears to be help-
 ing to push the dollar up
 further. Nomura Re-
 search Institute econo-
 mist Mark Cliffe esti-
 mates the Japanese put
 \$10 billion into foreign
 bonds in April. They also
 bid heavily at the \$28 bil-
 lion U.S. Treasury bond
 auction in early May.

"Investors want to take
 their money out of Tokyo and put it in
 the U.S.," says Takenori Kato, foreign-
 exchange chief at Continental
 Bank's Japanese arm.

Still, some say the Adminis-
 tration is heading for trouble if
 it continues to tolerate a rising
 dollar. Cincinnati Milacron Inc.
 President Daniel J. Meyer says
 he is already "quite concerned."
 And William R. Cline of Washing-
 ton's Institute for International
 Economics argues that unless
 the dollar retreats to 100 yen and
 1.33 marks, the trade deficit will
 begin to rise by 1990. But many
 others see only bad news in a dol-
 lar that cheap.

Economist Jeremy Hale of
 Goldman Sachs International
 Ltd. worries that a big dollar
 drop may trigger higher rates
 and push the U.S. into a reces-
 sion, probably with high infla-
 tion. And many of his money-
 market brethren agree. Later
 on, they say, the U.S. and
 the dollar may be in trouble
 again. But for now, no one
 wants to miss the party.

*By Mike McNamee in Washing-
 ton and William Glasgall in
 New York, with bureau reports*



MEXICO

SALINAS' FLASHY NEW STEP IN THE MEXICAN DEBT DANCE

He has relaxed foreign ownership rules—but will that lure investors?



NOW THE RELAXED STANDARDS ENJOYED BY HONDA EXTEND TO OTHERS

Much like Soviet leader Mikhail S. Gorbachev, with whom he's often compared, Mexican President Carlos Salinas de Gortari knows a thing or two about preemptive strikes. With Mexican debt negotiators and foreign bankers at odds over foreign investment, Salinas on May 15 announced a sweeping liberalization of rules governing foreign ownership in the Mexican economy. The decree strengthens Mexico's case in the talks on restructuring its \$100 billion debt. The new rules, says a World Bank official, "give a greater area of comfort to investors."

The timing of Salinas' move is crucial. As Mexico and the banks remain deadlocked over ways to reduce the country's debt, Mexico's foreign reserves are tumbling. Rumors are flying that the country will slip into arrears on its debt service, perhaps as early as this month. That might unleash a devastating flight of private capital if it isn't carried out with the approval of the World Bank and the International Monetary Fund.

Now, that support seems assured. One day after Salinas' decree, the World Bank approved Mexico's plans to spend 25% of a \$1.5 billion restructuring loan on debt-reduction schemes. This is the

first money to flow under Treasury Secretary Nicholas F. Brady's Third World debt-reduction plan. Not surprisingly, it's going to Salinas, a President who has followed World Bank and IMF recommendations to the letter: slashing spending, privatizing state-owned businesses, tearing down trade barriers, and now opening the doors to foreign investment.

Conspicuous by their absence from the new rules are debt-for-equity swaps—schemes by which investors can buy Mexican debt at a discount, convert it to pesos, and then spend the money on projects in Mexico. Such swaps have been a big stumbling block in the talks between Mexican debt negotiators and the bankers. The bankers want Salinas to reinstate the program, arguing that

Small businesses, which have been scared off by Mexico's red tape, may benefit from the changes most of all

it's a way to let the market reduce debt. Aside from gaining lucrative assets outside Mexico for themselves, banks can also make handsome fees as brokers.

But Salinas and his team are dead set against further swaps, except in tokenism. They say the program, which flourished briefly in 1986 and 1987, pumps too many pesos into the economy, spurring inflation. Whatever the merits of the argument, the investment-liberalization scheme blunts the bankers' argument that one of Mexico's biggest problems is its straitjacket on foreign investment.

BENDING THE RULES. In fact, Salinas' changes aren't as novel as they seem. For three years, the Mexican government has been bending rules requiring majority Mexican ownership on a case-by-case basis. IBM, Ford, Honda, and dozens of other companies have already swung deals without Mexican partners. In many instances, the new rules simply mean that the law now mirrors reality.

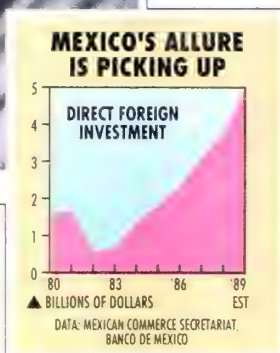
The updated regulations open some new areas for majority foreign holding, including iron, steel, cement, and some secondary petrochemicals such as fibers and plastics. The government will cling

tightly to "strategic" sectors such as petroleum, telecommunications, media, and transportation. But it will open up the creative telecommunications industry to 49% foreign capital. The new regulations also perform a "massive pruning" of red tape, says one U.S. banker in Mexico, ending what has long been an exasperating application process. Small companies could be the

biggest winners in the new climate, since they're most often scared away by the paper labyrinth. Now, investments of less than \$100 million in many sectors will be approved immediately—as long as investors run environmentally clean operations outside of congested Mexico City and other cities and keep their trade balances in the black.

Salinas' strategy for Mexico relies heavily on foreign investment (charitably). "We need billions of dollars, and not much of it's going to come from banks," says one senior Cabinet member. Commerce Secretary Jaime Serra predicts the new changes will raise foreign investment by 10% to 15% this year, from \$3.9 billion in 1988. Perhaps. But with Mexico City tabloids screaming "Mortoria!" these days, investors aren't likely to start writing checks until Salinas gets Mexico out of its debt morass.

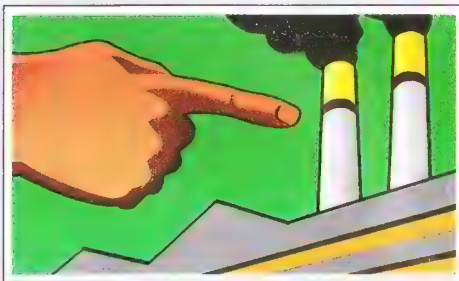
By Adrienne G. Bard in Mexico City with Mike McNamee in Washington and Elizabeth Weiner in New York



THE PUBLIC IS WILLING TO TAKE BUSINESS ON

Is business vulnerable to a backlash? Corporations win fairly high marks from the public for their general performance, but Americans have deep misgivings about business ethics. Many think companies would sacrifice the environment, safety, or health for the sake of bigger profits—and 62% say businesses would engage in price gouging.

Many people say they would take action to stop a company from doing



something they didn't agree with, ranging from the 76% who said they would boycott the company's products to the 2% who said they would sabotage its operations. It isn't just talk: Fully 37% of the public say they've already engaged in some form of protest over a company's actions. And they're likely to keep protesting, because the overwhelming majority believes that public activism has the power to change corporate behavior.

U.S. BUSINESS IN THE '80s: SUCCESS—AND EXCESS?

Let me read you some statements about America in the 1980s. For each, tell me if you tend to agree or disagree.

	Agree	Disagree	Not sure
American business should be given most of the credit for the prosperity that has prevailed during most of the 1980s	62%	34%	4%
Business has gained too much power over too many aspects of American life	69%	29%	2%
Most of the problems of American business are the result of unfair foreign competition	55%	42%	3%
On balance, business has benefited more than consumers from government deregulation	68%	25%	7%

HOW FAR WOULD A COMPANY GO TO TURN A PROFIT?

If you had to say, which of the following things do you think business would do in order to obtain greater profits?

Harm the environment	47%	Deliberately charge inflated prices	62%
Endanger public health	38%	Put its workers' health and safety at risk	42%
Sell unsafe products	37%	None	8%
Knowingly sell inferior products	44%	Not sure	4%

All but the last two include the 25% of respondents who said business would do all of the above

HOW WOULD YOU PROTEST A COMPANY'S ACTIONS?

If you believed a corporation was doing something bad for society, which of these things do you think you would be willing to do to stop it?

Participate in a letter-writing campaign to the head of the company	56%	Boycott the company's products by refusing to buy them	76%
Contribute money to a group opposing the company's actions	21%	Attend a rally protesting the company's actions	21%

Picket the company's headquarters or other facilities	14%
Interfere with the company's operations even if it meant being arrested	6%

Sabotage a company's operations	2%
None	2%
Not sure	1%

All but the last two include the 1% of respondents who said they would do all of the above.

DO PRESSURE GROUPS DO MORE GOOD THAN HARM?

For each of the following groups, do you think they do more good than harm or more harm than good?

	More good than harm	More harm than good	Not sure
Environmentalists	74%	21%	5%
Consumer advocates	64%	26%	10%
Animal-rights activists	57%	36%	7%
Activists trying to influence what's on TV	39%	55%	6%
Chamber of Commerce	75%	15%	10%
Anti-apartheid activists	37%	41%	22%

ARE YOU AN ACTIVIST?

Have you personally ever taken any action to protest something a company did that you didn't like, or not?

Have taken	37%
Have not	63%

CAN ORDINARY PEOPLE MAKE A DIFFERENCE?

How effective do you think ordinary citizens can be when they act together to try to change corporate behavior—very effective, somewhat effective, not very effective, or not effective at all?

Very effective	43%
Somewhat effective	41%
Not very effective	10%
Not effective at all	5%
Not sure	1%

THE BOTTOM LINE ON U.S. CORPORATIONS

Overall, how would you rate the performance of American corporations—excellent, pretty good, only fair, or poor?

Excellent	3%
Pretty good	56%
Only fair	32%
Poor	8%
Not sure	1%

Edited by Mark N. Vamos and Stuart Jackson

Survey of 1,247 adults conducted May 12-16 for BUSINESS WEEK by Louis Harris & Associates Inc. Results should be accurate to within three percentage points.

Commentary/by Paul Magnusson

PROMOTING HIGH-DEFINITION TV: THE PERILS FOR UNCLE SAM

Last fall, Michael S. Dukakis promised that if he were elected President, he would boost America's competitiveness through a series of partnerships between government and industry. He was trounced, but his idea is flourishing. Riding a tsunami of concern over Japan's lead in high-definition TV (HDTV), industrial policy is making a modest comeback under President George Bush.

The race to commercialize HDTV has stirred up a new competitive zeal in the Bush Administration. Just as war is considered too important to be left to the generals, politicians think the HDTV stakes are too high for private industry to handle alone.

Commerce Secretary Robert A. Mosbacher proposes a solution that's pure Duke-speak: "industry-led business-government partnerships" to spur the U.S. effort. Attorney General Richard L. Thornburgh wants to relax antitrust laws to allow American companies to manufacture the new products jointly. The Defense Dept. has allocated \$30 million to fund HDTV research.

Promoters of industrial policy are thrilled. "Bush may have come into office with no particular agenda for competitiveness, but the lid on the simmering anxiety over the issue has finally blown off," says Jeff Faux, president of the labor-backed Economic Policy Institute. The American Electronics Assn., calling HDTV "a once-in-a-lifetime opportunity for reentry into the consumer-electronics field," wants \$1.35 billion in federal aid.

But boosters of industrial policy would do well to look before they leap. Calls for government sponsorship of high-technology development, says economist John H. Makin of the free-market American Enterprise Institute, are "just this year's angle for getting help from the government."

Uncle Sam already shapes much industrial development, from tax breaks

to military-procurement policy. The current enthusiasm for winning the U.S. a piece of the HDTV market may be well placed. But Congress and the Administration should be careful that their search for a better TV screen doesn't turn into another raid on the Treasury. Some specific suggestions:

■ **Fix what's broken first.** The government could help all industries by correcting existing

should come only from existing programs. For example, Small Business Administration loans for dentist equipment and used-car lots could be diverted to better uses, such as research on cold fusion or fiber optics. And all programs should include sunset provisions.

■ **Avoid foreign entanglements.** West German officials have proposed a joint U.S.-European effort to fight Japanese dominance in HDTV. When the Europeans last tried such a multinational consortium, the result was Airbus Industries, which is costing its backers billions in endless subsidies.

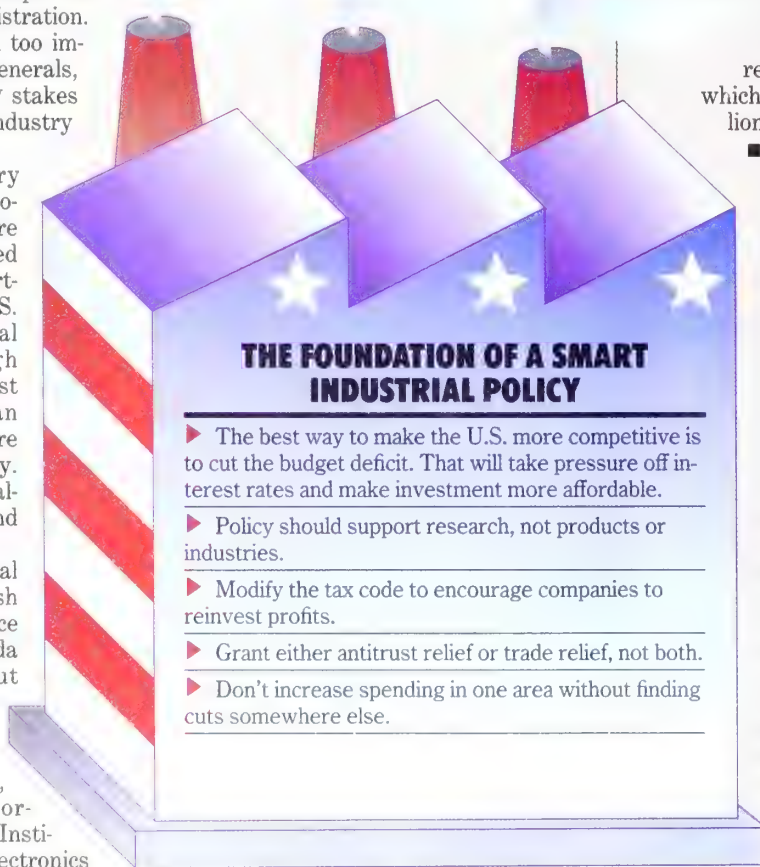
■ **Watch the big picture.** Federal resources should go to support knowledge and technological development first, products second, and specific industries last, at all. This is where Japan has been particularly effective. Even projects that fail to yield a marketable product advance technology. Witness Tokyo's fruitless efforts to promote artificial intelligence.

■ **Drive a hard bargain.** The government should offer help at a stiff price. Industry should promise to reinvest profits or tie wages to output. Linking salaries to productivity allows the company to maintain a healthy R&D budget during lean years while rewarding employees for sticking

out. And companies should not be awarded total protection

against foreign competition. Relaxation of antitrust rules is justified as long as foreign competition keeps U.S. companies from price gouging. But American industries shouldn't be allowed both trade protection and antitrust relief.

The White House denies that it's practicing the industrial policy Bush denounced so fervently during the campaign. But whatever it wants to call its promotion of HDTV, the Administration should keep a tight rein on its most enthusiastic supporters—and firm hand on its wallet.



THE FOUNDATION OF A SMART INDUSTRIAL POLICY

- ▶ The best way to make the U.S. more competitive is to cut the budget deficit. That will take pressure off interest rates and make investment more affordable.
- ▶ Policy should support research, not products or industries.
- ▶ Modify the tax code to encourage companies to reinvest profits.
- ▶ Grant either antitrust relief or trade relief, not both.
- ▶ Don't increase spending in one area without finding cuts somewhere else.

policies. The tax code promotes debt and discourages savings, raising interest rates and the cost of capital. Making permanent the on-again, off-again research and development tax credit would help. And reform of export controls is needed to ensure that licensing delays and onerous restrictions don't turn buyers away.

■ **No net cost.** Federal pilot programs often balloon out of control because members of Congress want to snare pieces for their districts. To keep costs down, any grants or loan guarantees

NOW CRAY FACES LIFE WITHOUT CRAY

The founder packs up—with his latest supercomputer in tow

For Seymour R. Cray, father of the supercomputer, the script seemed familiar. Faced with sluggish sales and earnings and a plunging stock price, Cray Research Inc. management decided the company could no longer afford to fund its founder's development group. As Cray told shareholders on May 16 of plans to make his Colorado Springs (Colo.) group a separate company, the 63-year-old computer designer recalled two earlier occasions when fiscal reality blocked his way. In 1957, when Univac Corp. refused to fund an ambitious project, Cray left for start-up Control Data Corp. When CDC balked at another Cray program in 1972, he founded his own company. Now, Cray is being pushed out again. "It was management's idea," he told **BUSINESS WEEK**.

It was a choice that Cray Research Chairman and Chief Executive John A. Rollwagen wishes he never had to make. Addressing the stunned shareholders, Rollwagen gamely accentuated the positive. "Both these companies can thrive," he told them.

Wall Street begs to differ. The news sent the Minneapolis-based company's stock tumbling 6 points, to 49¾, on May 16. The following day, it dropped an additional 2½. "They're selling this as 'two-is-better-than-one,'" says Gary P. Smaby, analyst for Needham & Co. in Minneapolis. "I'm not yet convinced."

'CRAY WEST.' The move also raises questions about how well the U.S. can hold its lead over Japan in supercomputers. Just a month earlier, Control Data disbanded its poorly performing ETA Systems supercomputer subsidiary, leaving Cray Research as the only active supplier of full-fledged supercomputers in the U.S. Rollwagen says spinning off the new Cray Computer Corp.—already becoming known as "Cray West"—will give customers another choice.

That seems to be the view in Washington as well. The only worry there, according to a high trade official, is wheth-

er the new company can find capital beyond the \$150 million in cash and assets pledged by Cray Research. "It sounds good as long as Seymour can get the resources he needs to manufacture the system," says the official. His Cray-3 project has already consumed \$50 million in the past 18 months and, with a tentative introduction date of late 1990, it is at least a year behind schedule.



SEYMOUR CRAY: "I DON'T MIND THIS ROLE. I KIND OF LIKE STARTING OVER"

By spinning off the Cray-3, Rollwagen may have thrown the baby out with the bath water. The biggest problem is that the company loses the talents of Seymour Cray, who made it the undisputed supercomputer champ. What's more, Cray Research is left with the more conservative C-90 supercomputer development project that uses conventional silicon chip technology rather than the superfast gallium-arsenide chips that Seymour Cray plans for the Cray-3.

Cray Research's caution earlier drove off Steven S. Chen, a designer of the Cray X-MP. Now, Chen's IBM-funded

The spinoff raises the question of whether the U.S. can preserve its lead in supercomputers over Japan

startup is pursuing his radical parallel-processor design. Cray Research's aversion to risk could backfire, warns Larry L. Smarr, director of the National Center for Supercomputing Applications at the University of Illinois. "In a business where your products are obsolete every two years, you don't survive by playing it safe," says Smarr.

UP AGAINST IT. But Cray had few options. It was already under pressure from Wall Street after the decline in its stock from a high of 135¾ in April, 1987. Between the Cray-3 and the C-90, the company had spent close to \$100 million in the past 18 months. Last year, as Cray Research's revenue growth slowed to 10% and earnings inched up by 6%, R&D costs mushroomed by 35%. "It doesn't take either of my degrees from

MIT or Harvard to see what happens to the bottom line," says Rollwagen. In the quarter ended Mar. 31, Cray had its first operating loss since 1976. Cray President Marcelo A. Gumucio says a recession could batter Cray. Federal budget cuts would also slow sales to the government and defense contractors.

Given that scenario—and the possibility of a takeover attempt—Rollwagen was forced to cut back. The C-90, due out in 1991, is moving along better than planned, according to Rollwagen, and is expected to be comparable in speed with the first

Cray-3 models, even though computer scientists say Cray-3 technology could leap ahead in future generations. And the C-90 will be a direct successor to the company's successful X-MP and Y-MP line, whose software is favored by the commercial customers Cray Research has targeted for future growth.

That tilted the scales for Rollwagen, who says he spent six months mulling over alternatives. Rollwagen, whom Seymour Cray had recruited in 1975, even considered killing the Cray-3 project outright as a last resort. Late in April, Rollwagen flew to Colorado Springs to talk things over with Seymour Cray. He agreed to the deal, which will involve distributing 90% of the shares in the new company to Cray Research shareholders. "I don't mind this role," says Cray. "I kind of like starting over." Who knows, he may also enjoy having the last laugh on companies that thought they couldn't afford to keep him around.

By Russell Mitchell in Minneapolis

WPP, THE NEW GIANT OF . . . PR?

Buying Ogilvy gives it more than a big new shop on Mad Ave.

When Martin Sorrell, chief executive of WPP Group PLC, persuaded the board of Ogilvy Group Inc. to accept his \$864 million takeover offer on May 16, most of the focus was on advertising. After all, WPP now owns two top Madison Avenue shops—Ogilvy & Mather Worldwide Inc. and J. Walter Thompson Inc.—and is neck-and-neck for first place with competing agency Saatchi & Saatchi PLC. But the deal also makes WPP the leading public-relations company in the world, with \$193 million in combined annual-fee income. And WPP will control an impressive array of marketing-services firms.

The acquisition should help WPP take advantage of the continuing growth in these nonadvertising fields. As the growth of U.S. ad spending declines, many agencies are entering faster-growing communications businesses such as public relations, direct marketing, sales promotion, and market research. Ogilvy and WPP are no exception. Nonadvertising services made up almost 40% of Ogilvy's business and more than 30% of WPP's revenues before the acquisition.

AUTONOMY PACT. Public relations will make up the biggest slice of WPP's nonadvertising pie. PR firms typically enjoy only slightly higher operating margins than ad agencies, but the business is growing about 10% a year, compared with advertising's 6% annual growth.

Combining the two PR companies—Ogilvy & Mather PR Group and Hill & Knowlton Inc.—makes sense. But it's out of the question for now. Ogilvy Chairman Kenneth Roman agreed to WPP's offer on the condition that the two companies operate independently. Golden parachutes for Ogilvy top managers will open immediately if the autonomy pact, effective through 1991, is violated. Still, the agreement won't stop Sorrell from instituting his trademark financial controls and cost-cutting techniques.

Sorrell insists he wants Ogilvy to operate independently. That hasn't stopped him from assembling a committee of Ogilvy and JWT executives "to look for business opportunities at the two companies," says Sorrell. Even if they don't find any, Ogilvy gives WPP powerful ammunition in its war with Saatchi.

By Walecia Konrad in New York



A BENETTON STORE IN FLORIDA: ALL ACROSS THE NATION, SALES HAVE STALLED

BENETTON TARGETS A NEW CUSTOMER—WALL STREET

But given its sullied image, will investors be interested?

These days, Aldo Palmeri is a man in almost constant motion. The fast-talking Sicilian who manages the global apparel empire of Italy's Benetton Group has a brand-new product to sell: stock in the company. Benetton is offering 8 million to 9 million American Depository Receipts (ADRS) worth around \$150 million on the New York Stock Exchange. It's the first time an Italian company has attempted to float stock directly on Wall Street. Palmeri and Federico Minoli, general manager of Benetton USA, have been crossing North America aboard a company-owned Cessna trying to fire enthusiasm among investors. "It's been exciting and pretty tiring," Palmeri says between flights. "But the reception has been fantastic."

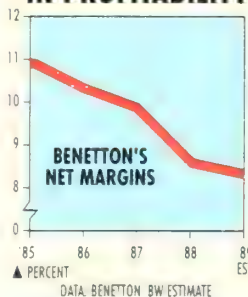
Maybe so, but Benetton has chosen a difficult moment to stretch out its palm to Wall Street. After years of double-digit profit growth, net income last year was flat, at about \$99.5 million, and margins have declined (chart). What's more, sales of Benetton clothing in some of its largest

markets, including Italy and the U.S. have stalled.

It also doesn't help that Benetton's image has been sullied in the U.S. by a series of legal actions. The company is currently battling five lawsuits involving the owners of 17 stores in Alabama, Mississippi, Oregon, Rhode Island, and five Midwestern states. The latest was filed by Sherry L. Cupit in U.S. District Court in Hattiesburg, Miss., on May 12—the same day Palmeri made his pitch to institutional investors in London and Glasgow. Cupit, who owned two stores in Mississippi, charged Benetton with breach of contract for, among other things, repeatedly shipping goods she didn't order and reneging on a payment agreement they had worked out.

The New York office of the Federal Trade Commission also is investigating Benetton for possible violations of FTC franchising rules. Says Boston lawyer Harold Brown, whose client James M. and Kathleen Donelan have charged Benetton with violating

A MARKDOWN IN PROFITABILITY



chise law with their Warwick (R. I.) e: "Franchisees are being done in and right."

Benetton officials dismiss such attacks. They say the handful of lawsuits and store closings are insignificant when measured against the 650 independently owned outlets operating in the U. S. Palmeri argues that some store owners are joining Benetton for their own business takes. And he points out that Benetton stores, like all U. S. apparel retailers, caught in a sales slump last year. Nevertheless, company officials have acknowledged growing pains. Former Kinsey & Co. consultant Minoli has been working for more than a year to strengthen management of U. S. operations and improve relations with store owners. Minoli has been shifting development away from tiny, 1,000-square-foot stores to outlets more than four times larger that carry clothing and accessories for adults and children.

Despite its problems in the U. S., which accounts for 13% of Benetton's sales, it's hard to take away from the company's international achievements. In 10 years, almost 5,000 shops have opened in 79 countries. Last year, Benetton sold \$1.1 billion of colorful, moderately priced outfits. A booming market in Japan, where Benetton has 330 stores.

DEFLECTIONS Back in Italy, Benetton's share has been suffering. Its shares, plunging on the Milan Bourse after the public offering in 1986, are trading around \$7.85, half the peak before the October, 1987, crash. A rash of senior management defections, including the chief financial officer, and hints of strategic differences among the four Benetton siblings, who own about 80% of the stock, have shaken local confidence in the company. "I think one of the reasons they've gone to Wall Street is that none in Italy would buy extra shares now," says Francesca Lolli, an Italian equities analyst at London stockbroker Moore Govett Ltd. Though Lolli says she's "not too excited about the company," she sees little downside risk in the shares. The issue is priced at 13 times earnings with a yield of about 5%.

Palmeri is nothing but confident. For now, floating stock in New York is the first step toward making Benetton a real multinational: Next September, he plans to apply for a Tokyo listing. He scoffs at rumors that he might be quitting soon because of differences with Benetton family members. The company just extended his contract as general manager for another three years. "Benetton is too fascinating a company to leave," he says. But if Benetton can't drum up investor confidence, it may be fascinating for all the wrong reasons.

By John Rossant in Rome and Amy Poehler in New York

EUROPE'S GARBAGE SMELLS SWEET TO WASTE MANAGEMENT

The U.S. toxic-waste giant is making a big play on the Continent

Waste Management Inc. was sure it had found a gem. Early this year, the French tentatively agreed to sell a state-owned hazardous-waste disposal company, one of France's largest, to Waste Management and French partner Chantiers Modernes. It seemed like a perfect marriage for the U. S. king of trash, now expanding rapidly into Western Europe.

But the French have left Waste Management at the altar. BUSINESS WEEK has learned that the object of its desire, PEC Engineering, is off the market. A government spokesman says handling toxic chemicals is "too sensitive" to be left in the hands of a private company.

Perhaps. But Waste Management sees another force at play: PEC's major domestic rivals lobbied fiercely to keep Waste Management at bay. "We know there were pressures not to privatize PEC," says Fred Weinert, who heads Waste Management's international unit.

ON A SPREE. As the top U. S. handler of hazardous waste, with \$3.5 billion in revenues, Waste Management could make a big splash in Europe, where smaller companies cling to home markets. "There really aren't any major hazardous-waste companies in Europe," notes Deborah Thielsch, a First Boston Corp. analyst. That's why, with an environmental movement sweeping the Continent, Waste Management is on a spree: It has bought four companies there in the past year. "Garbage is a global problem," says Chairman Dean L. Buntrock.

As the French experience shows, Buntrock's overseas gambit isn't a cinch. It faces protectionist pressures and tough competitors from back home. Houston-based rival Browning-Ferris Industries Inc. has already gobbled up 10 garbage-hauling companies during the past year.

Another problem: image. Since 1980, a

Waste Management subsidiary, Ocean Combustion Service, has burned toxic waste on incineration boats about 100 miles off the Netherlands coast in the North Sea. Greenpeace International and others have blasted Waste Management for leaving toxic deposits in the sea. The company says the practice is environmentally safe, yet it plans to abide by a ban set to take effect in 1994. Even so, "Waste Management suffers a

big image problem in Europe," says Ernst Klatte, Greenpeace's Brussels chief.

LITTLE CHOICE. Yet even critics like Klatte can see why Waste Management is looking for European expansion. Europe's landfill shortage has reached a crisis. West Germany exports about 1 billion tons of trash annually to East German landfills. And since tougher pollution rules are likely to drive up operating costs, Europe's band of small waste companies will have little choice but to seek larger partners. Just one state-of-the-art landfill costs about \$60 million. That gives Waste Management a decided advantage. Profits last year surged 42%, to \$464.2 million on \$3.5 billion in sales, which gained

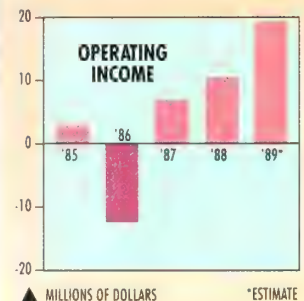
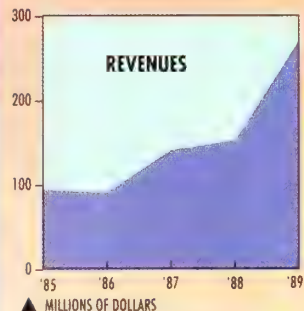
29%. Wall Street has sent the stock up to a 52-week high of almost \$50 a share.

That financial clout makes companies with landfill and incineration capacity affordable. The company now has about 10 big landfills in Europe, and it hopes to build a network of land-based incinerators in each West European market. If Waste Management can get in fast enough, it stands to win big. Already, its overseas sales this year should double (chart). While that's just a puny part of the company's revenues now, Europe offers lots of future growth. The greening of Europe could mean loads of greenbacks for Waste Management.

By Brian Bremner in Oak Brook, Ill., with Pia Farrell in Paris

WASTE MANAGEMENT'S OVERSEAS GROWTH

International results



DATA: PRUDENTIAL-BACHE SECURITIES INC.

DEALMAKERS

SPLITSVILLE FOR A HOT LBO TEAM

Hicks and Haas made oodles together, but their styles clashed

Leveraged buyout partners Robert B. Haas and Thomas O. Hicks started out modestly in 1984 when they hung out the Hicks & Haas shingle. Over pizza in a Dallas restaurant, they vowed to do \$1 billion in deals in 10 years. Talk about lowballing. Five years later, the company passed the \$4 billion mark. Says Tom Davis, a senior vice-president at Donaldson, Lufkin & Jenrette Securities Corp.: "They were one of the two or three top LBO firms."

No longer. On May 11, Hicks and Haas broke up, citing philosophical differences. But insiders say that Haas, a brash Yankee known as a tenacious negotiator, got tired of carrying Hicks, the well-connected, slower-moving Texas financier. Some say Hicks's ties to Dallas' old-boy network have become less important to Haas, who is dealing outside the depressed Texas market. The principals deny it. "That's just barroom gossip," says Hicks. Insists Haas through his spokesman: "That's totally off the wall."

Just the same, something happened. Hicks was a major player at first. Haas moved to Dallas from Cleveland because



HICKS AND HAAS IN TIMES GONE BY: \$4 BILLION IN DEALS IN FIVE YEARS

Hicks, who headed InterFirst Corp.'s venture-capital arm, had lots of contacts. Those ties came in handy in the pair's first big deal, buying Dr Pepper Co.'s local bottling operations in 1985. A Dallas businessman had told Hicks that Dr Pepper wanted to sell. Hicks got the financing locally, through MCorp.

WELL-REHEARSED. But in the past two years, Hicks's role diminished. Haas reached outside Texas to grab such industrial companies as Thermadyne Industries Inc. in St. Louis and Materials Applications Group in San Diego. Even the partnership's 1986 merger and sale of Seven-Up Co. and Dr Pepper was orchestrated by Haas. "You just didn't see Tom anymore," says one investment banker. "He just quit working." By contrast, Haas is a notorious workaholic. One adviser recalls a plane trip to New

York during which Haas wrote a script for the next day's negotiations, then rehearsed it. "He figures out what he's going to say and then guesses how the other side will respond," says one banker. "And he is almost always correct."

Hicks admits he's tired of being overshadowed: "When you have two people in charge," he says, "and one is taking charge, it becomes essential for the other to make a change." He has formed a new firm with John Muse, a former managing director at Prudential-Bache Securities Inc., which is investing up to \$100 million. They plan to focus on deals with Southwest insurers. Muse isn't expecting Hicks to change: "Tom wants to smell the roses a bit more."

CONTRASTING BELIEFS. Surely, genuine differences prompted the split: Hicks believes the wave of LBOs has crested. LBO firms must now raise large pools of capital to be tapped when a good deal comes along. Haas, on the other hand, plans to keep the old H&H formula, recruiting investors one deal at a time. The firm never had trouble drawing investors: Its \$45 million stake in Dr Pepper/Seven-Up yielded a 14-to-1 return last year when Pru-Bache bought it for \$600 million.

The pair recently formed a holding company to shepherd their industrial operations. They also still jointly hold a stake in Dr Pepper/Seven-Up. "But don't expect them to hold on for long," says Jesse Meyers, a beverage-industry analyst. "They aren't long-term players." Evidently, that includes partnerships.

By Kevin Kelly in Dallas

BAKER HUGHES LOPS OFF A WEAK LIMB

Baker Hughes Inc. Chairman James D. Woods never leaves any doubt about who's in charge. When the proposed merger of Baker International Inc. and Hughes Tool Co. nearly collapsed two years ago, Woods secured the deal by threatening a \$1 billion suit. Then the Baker partisan put his men in the top spots and remade the company. How long did he wait? "About 24 hours," says E. C. Broun Jr., a former Hughes vice-president and director.

Now, Woods is at it again. On May 17, he announced he had sold Baker Hughes's mining-equipment operation, which accounted for almost 10% of the company's \$2.3 billion in revenues. The buyer? A Finnish mining and textile company, Tampella Ltd., which paid an estimated \$155 million.

The deal begged to be done. Productivity gains in mining coal have driven

down orders for new equipment. Even with the help of a profitable sideline in waste processing, Baker Hughes's mining outfit has lost money since 1985. Last year, Woods gave up and put the mining operation up for sale.

'TOUGH.' Now, the 57-year-old executive has his hands full with the oil industry. Faced with depressed markets, he has used "brutally tough cost-cutting," says one person close to the company. Woods slashed more than \$80 million a year from Baker Hughes's annual operating costs. The move paid off: He turned a 1987 operating loss of \$144.2 million into an \$81 million operating profit in fiscal 1988.

Despite Woods's apparent success, Baker Hughes lacks the flexibility of such rivals as Dresser Industries Inc., which will have nearly 10 times Baker Hughes's 1989 cash flow, according to Salomon Brothers Inc. analyst James

D. Crandall. Last year, Woods tried to sell his oil-pumping operations, BJ Tita Services Co. and its international divisions, for about \$200 million. With no takers, he withdrew. But competitor Halliburton Co. and Schlumberger Ltd. are far ahead in pumping technology. Woods needs to sell the divisions to make huge new capital expenditures.

Woods also must beef up research and development. Such new technology as horizontal drilling lets one rig tap several reservoirs, and rivals Smith International Inc. and Eastman Christensen Co. have zipped ahead. To catch up, Woods formed a division for the new drilling process and last year boosted overall capital spending 37% to \$62 million. It figures: The guy who wielded a \$1 billion lawsuit to create Baker Hughes is sparing nothing to ensure his company stays in the black.

By Todd Vogel in Houston

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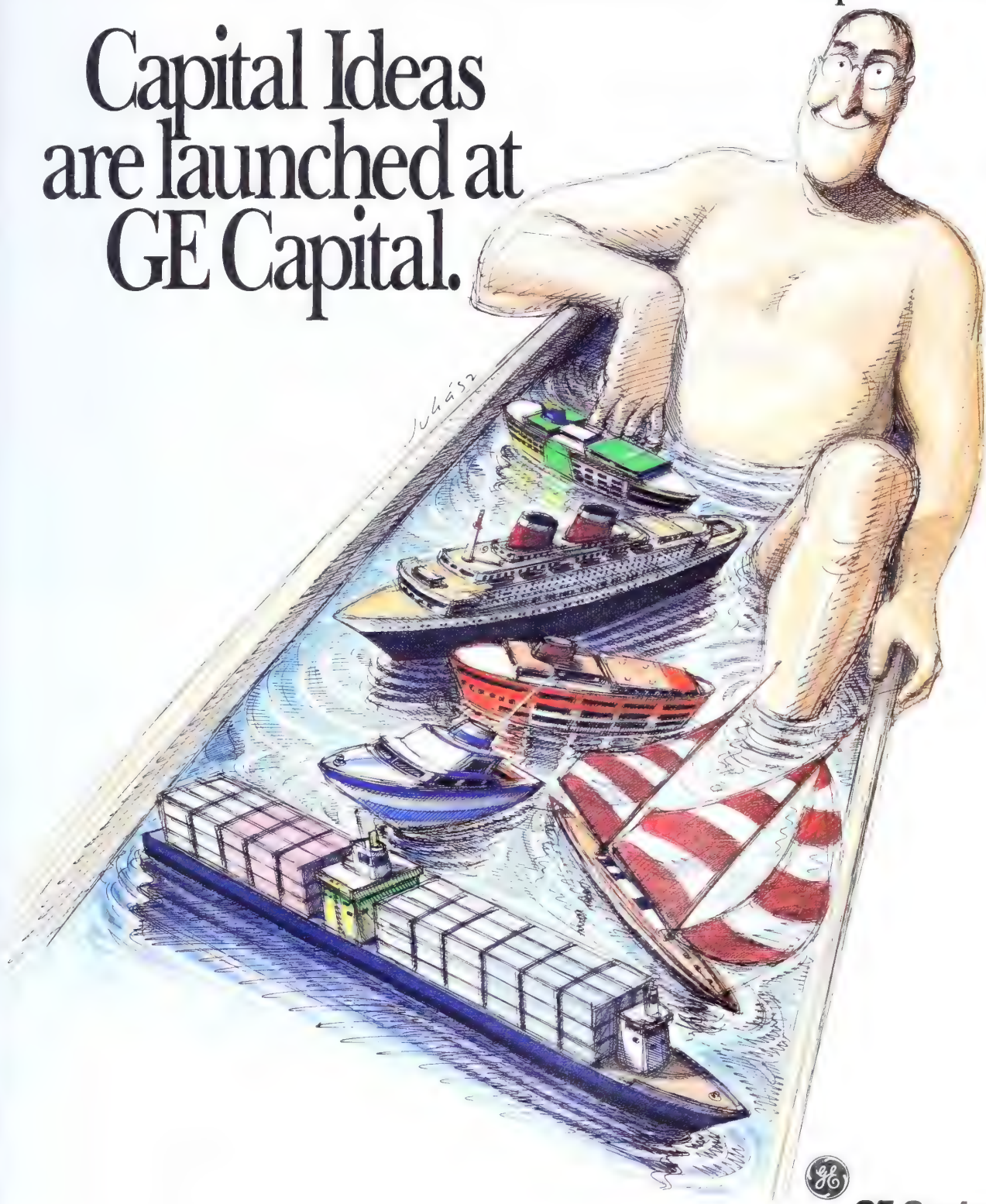
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OFF AND STUMBLING: THE FAMED TRACK MAY GIVE WAY TO CONDOS AND OFFTRACK BETTING

IS HOLLYWOOD PARK ON THE WAY TO THE GLUE FACTORY?

A raider makes his move to take over the money-losing racetrack

Since it opened in 1938, Hollywood Park racetrack has been a playground for movie stars and moguls. Its first board members included Al Jolson and Warner Brothers' Jack L. Warner, and more than one winner was rooted home by the likes of Walt Disney and Cary Grant. Even now, Michael Jackson and Elizabeth Taylor can be seen lining up at the exacta window.

Since the early 1980s, though, the stars haven't had much company. Attendance is down as punters have succumbed to the lure of the state lottery and offtrack betting, saddling the park with mounting debt and \$16 million in losses since 1987 (chart). Stock in the track, which is traded over the counter, hit its high back in 1983. Now comes the final indignity: A raider—a Denver truck-trailer maker, no less—wants to end live racing there altogether.

With a 5.6% stake in the racetrack, Thomas W. Gamel, 49, is contemplating a proxy fight or takeover bid, and he has sued the track to get its shareholder list. Ranged against him are some of Hollywood's wealthiest power brokers, including financier Marvin Davis and onetime entertainer Merv Griffin, who sit on the track's board. They're led by Marjorie L.

Everett, 67, Hollywood Park's tenacious chief executive, who owns 14.8% of the company.

At issue is what to do with the 340-acre Inglewood (Calif.) site on which the racetrack sits. The prime attraction is the nearby Great Western Forum, where the Los Angeles Lakers play basketball. Gamel envisions a residential and commercial complex alongside an offtrack betting facility in what is now the 10,400-seat grandstand. To fund the development, he wants to sell Hollywood Park's thoroughbred racing dates to other local tracks. That, snorts Hollywood Park lawyer Robert Forgnone, "would be like suggesting that General Motors give up the manufacture of automobiles."

Everett, who declined to be interviewed for this story, told Gamel his proposals were "shortsighted" and insisted that Hollywood Park would become profitable again. But time may be running out on the track—and Everett's reign. Wells Fargo Bank, which has lent

the track about \$98 million, could demand full repayment by July 31. Shrinking shareholder's equity and negative cash flow put it in default on its loan covenants in 1986, forcing it to suspend dividend payments in 1987.

In April, outside auditors warned that the company might fail. One way it would be to sell the 300-acre site on which the company's Los Alamitos harness track sits. But a \$95 million bid fell through in February, and the board is considering a new \$60 million bid.

Gamel is more concerned with Hollywood Park. Although Everett introduced exacta and pick-six betting and brought the first Breeder's Cup race series to the park, Gamel blames her for "running a first-class track into the ground." He wants her to resign. Failing that, he says, the board should sack her. Poor management and botched expansions have alienated fans and employees, he contends, and renovation of the rundown Hollywood Park facility would be too costly. Instead, Gamel favors using the park's modern structure to receive racing broadcasts from other parks.

He may know what he's talking about. A racehorse owner himself, Gamel sits on the board of crosstown rival Sausalito racetrack until he quit to pursue his bid for Hollywood Park.

IRON WILL. Everett and Gamel have tangled before. In 1986, he was a member of a group that bid \$35 a share, or \$38 million, for the company, only to be turned away. Hollywood Park stock is now trading at about \$26.

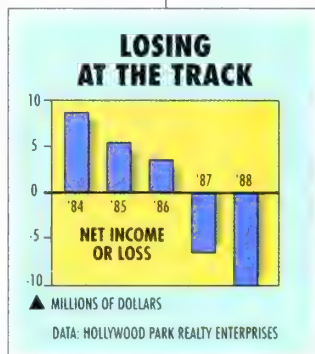
Despite that anemic price, Everett is sure to put up a furious fight. Scraggy enough to have broken her arm two years ago while sliding during a company softball game, she rules over the track with an iron will. Critics say she refuses to delegate even the most mundane tasks to underlings.

"She runs a totalitarian regime," says Jon B. Scheim, president of Green Street Advisors, a Newport Beach (Calif.) firm that researches real estate securities. "To get an annual report, I had to go through Marjorie Everett—and I had to tell her why I wanted it."

So what happens when the trailer maker from

Denver comes face-to-face with the protector of Hollywood's racing heritage? Everett has most of Tinseltown on her side. Gamel, for his part, can entice shareholders with a quick return. While Hollywood Park's glamour fades, he's coming up fast on the outside.

By Kathleen Kerwin in Los Angeles



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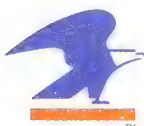
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ENTREPRENEUR, MAY 1988

SOUTHMARK BITES AN \$829 MILLION BULLET

► On May 12, Southmark Corp. pulled a quarter-century-old surprise from its closet and announced that it had sold the company to a consortium of investors for \$829 million. The sale was a surprise because Southmark had been a private company since its founding in 1963. The consortium, led by the investment firm of J.P. Morgan & Co., included several other investors, including the company's own management. The sale was a significant event for the company, which had been a private company since its founding in 1963.

Southmark's private nature had been a source of mystery for many years. Although they left the company in sorry shape, the pair received severance pay of \$1.8 million and remain on board as consultants.

SKINNER WINS ON NEW FUEL STANDARDS

► After a long battle, Arthur D. Little (ADL) has won the right to set the new fuel efficiency standards for the automotive industry. The standards will be based on a new test cycle that will be more realistic than the current one. ADL's victory was a significant win for the company, which has been a leader in the field of automotive engineering for many years.

Secretaries postponed the day of reckoning in response to the new standards.

MAXWELL FINDS IF YOU CAN'T BEAT 'EM...

► Media baron Robert Maxwell has found a way to beat the competition. On May 16, he announced that he had acquired a significant stake in the British Broadcasting Corporation (BBC).

Maxwell's stake in the BBC will help both men shore up their positions in British television. Maxwell's new stake in the BBC will help both men shore up their positions in British television.

Maxwell's stake in the BBC will help both men shore up their positions in British television. Maxwell's new stake in the BBC will help both men shore up their positions in British television.

IS PROCTER SWEARING OFF SOFT DRINKS?

► Procter & Gamble's frustration in its effort to become a major player in soft drinks may be about to give up. The consumer goods giant has announced that it will explore the possibility of selling Crush, which it purchased in 1980. Procter earlier sold a bottle that it bought to learn about the business.

P&G's lack of bottling network and lack of a strong sales force in the soft drink market may lead to the sale of the business.

SEPARATING CHURCH FROM UPSTATE

The not really are different from the rest of us. Consider Ronald Lauder, an heir to the Esterline fortune. He wants to be mayor of New York, and he's given little chance of winning, but he's financing his bid to the tune of \$24 million.

As if the rigors of the new-party mayor's campaign are not enough, Lauder is now embroiled in a dispute with his neighbors in East Hampton, N.Y., where he owns a summer home. Lauder wants to move a 150-year-old Greek Revival church from upstate New York to his property. He needs three zoning variances, and his neighbors are determined to prevent him from getting them. Lauder's lawyer, William Fleming, says his client just wants a place to be away from any maelstrom in his house. Although the property already contains a barn, a pool house, and two outbuildings, it's tough to get good privacy these days.



U.S. market. But the company is steering ahead in its campaign to increase its stake in juices and noncarbonated beverages. The latest move: the March purchase of Sundor Group, maker of Sunny D and Minute Orangeades.

HIGH NOON AT PRIME COMPUTER

► After six months of angry letters and lawsuits, the saga of Bennett LeBow's \$970 million bid for Prime Computer seems headed for a denouement. On May 16, Prime's chairman, David L. Katz, set aside the company's position.

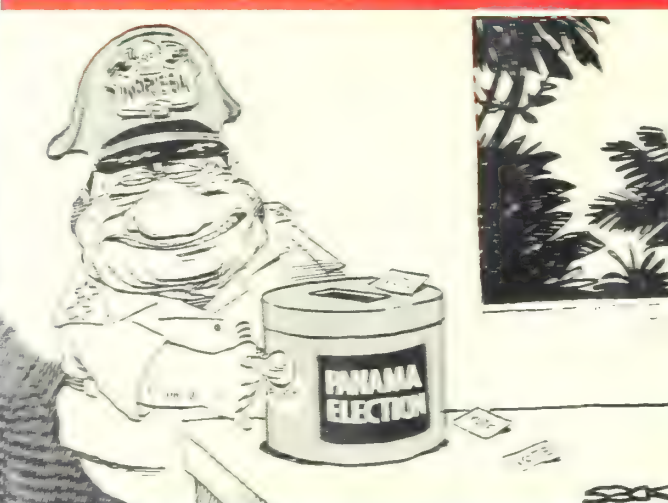
LeBow had given LeBow a June deadline to come up with a cash to back his tender offer. LeBow hasn't responded.

By May 17, doubtful ar-trageurs were abandoning their positions, and Prime stock fell 1 point to about \$4. A substantial discount to LeBow's \$24 offer. With no Prime bid, the bid for LeBow's takeover vehicle weakened by the long shot, one large investor speculated that the way may be open for a third contender, possibly a Japanese buyer.

DEL MONTE IS GETTING RIPE FOR PICKIN'

► Bidders for bits of Sun Microsystems are starting to emerge. On May 14, United Brands, a packaged- and fresh-food business controlled by the late Pat Lauder, reported that it would bid for all or part of Sun's Del Monte fruit and vegetable business. Analysts say Del Monte was valued at about \$1 billion.

United Brands is already one of the world's largest purveyors of bananas and other fresh fruit under the Chiquita brand name. But it may not be able to bid against the likes of H.J. Heinz Co. or ConAgra, which are also interested in the business.





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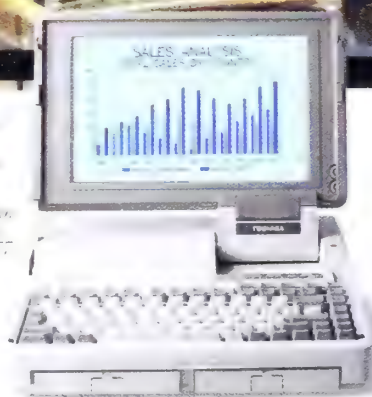
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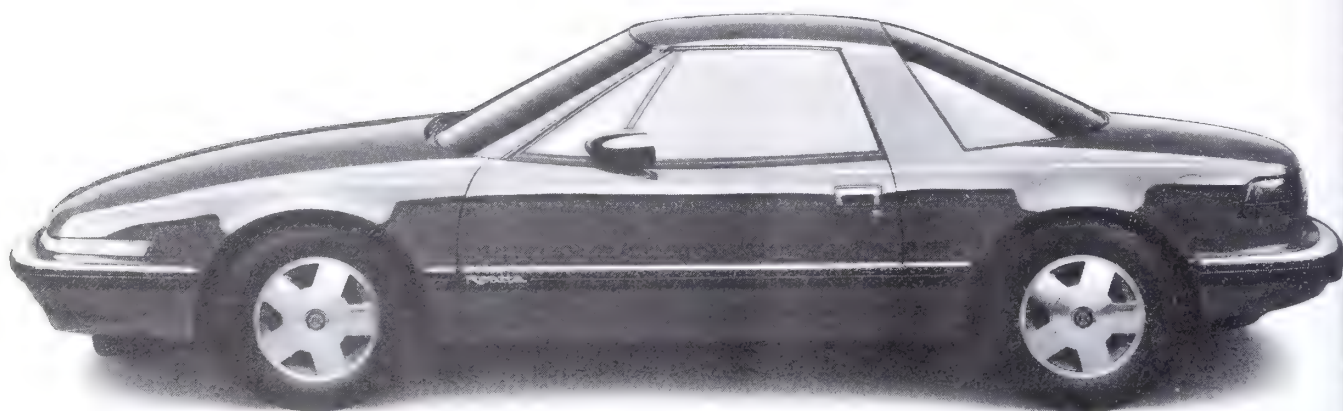
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TAX PARANOIA IS CAUSING DEADLOCK ON THE HILL

His lips say no. His eyes—and his aides—say maybe. And the result is a tax stalemate that is producing legislative paralysis in Washington.

President Bush is sticking to his promise of no new taxes. Meanwhile, congressional Democrats won't propose revenue increases because they fear Bush is dying for the chance to label them with the tax-and-spend label that Ronald Reagan died so successfully. What began as posturing is now hurting both sides. With no money for new spending, even modest and widely popular legislation is languishing.

The most notable victim of the deadlock is Bush's own slender legislative program. His proposal to reduce capital gains taxes is a nonstarter because the White House won't say how to make the \$24 billion that Congress estimates the cut would lose over the next five years. The Administration has abandoned its efforts to curb leveraged buyouts, in part because most solutions discourage borrowing by raising taxes on corporate debt. Proposed tax incentives for child care and economic development in low-income neighborhoods are on hold.

U FIRST. Congress' own agenda isn't faring any better. The Administration is backing a bipartisan initiative to simplify complex rules designed to prevent discrimination in employee benefit plans. Easing the provision, known as Section 89, is the top item on the legislative wish list of small business lobbyists. But the fix could cost \$100 million a year in revenue, and the White House wants to propose a way to recoup the loss. At a May 9 hearing, Senate Finance Committee Chairman Lloyd Bentsen (Tex.) confronted Dana L. Trier, Treasury's tax counsel, over the changes. "What I want to know is, 'Where do we get the money?'" said Bentsen. "We're going to walk that plank together. Do you read my lips?" Bentsen himself wants to reduce premiums for Medicare's new catastrophic illness coverage. But he has the same problem: how to make up the estimated \$5 billion a year in lost receipts.



BENTSEN: NO SOLO ACT

Before Congress can even begin to think about any new spending programs or tax cuts, lawmakers have to find the \$5.3 billion worth of unspecified revenue increases called for in the April budget agreement with the White House. The chore will be further complicated by the fate of several tax breaks that are due to expire this year. Extending those provisions, including incentives for moderate-income rental housing and corporate research, would cost \$2 billion more. Both Bentsen and House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) have made it clear that they will not move any tax hikes unless Bush endorses them in advance. So far, the Administration has refused.

The White House is adding to the confusion with hints by aides that Bush may eventually soften his opposition to new taxes. Asked on May 16 whether Bush might agree to a tax hike in time for the 1991 budget, Press Secretary Marlin Fitzwater said the President "takes the budget one year at a time."

GIVING A LITTLE? The tax paranoia makes a mockery of Budget Director Richard G. Darman's claim that the April budget accord created a climate of mutual trust between the White House and Capitol Hill. At some point before the 1990 fiscal year starts on Oct. 1, odds are that the

White House will relent—a little. Movement by the President would pave the way for some relatively cheap initiatives, such as the simplification of Section 89. But more costly items, such as child care and capital gains, will have to wait at least until fiscal 1991.

Meanwhile, like gunfighters in an old B movie, Bush and congressional Democrats warily eye one another up and down Pennsylvania Avenue. Neither wants to draw first, but neither wants to back down. As long as Bush and the Congress continue this macho faceoff, legislation both sides want will remain out of reach.

By Howard Gleckman

CAPITAL WRAPUP

ENVIRONMENT

Controversy over the proposed Twin Forks Dam in Colorado has landed in the White House. The Bush Administration is in the middle of a nasty interstate GOP squabble. The trouble started when Environmental Protection Agency chief William K. Reilly announced a review of the \$500 million project on the South Platte River. National party Chairman Lee Atwater soothed angry Colorado Republicans, including Senator William L. Armstrong, when he told them at a fund-raiser that he would take their concerns directly to the President. But Atwater's involvement outraged both environmentalists and Nebraska's Re-

publican Governor Kay Orr, a staunch foe of the dam, which could harm a valuable fishing stream in Nebraska. The split between the state parties means trouble for Bush no matter what he does.

SPACE

Surprisingly, NASA has a supporter in Budget Director Richard G. Darman. Although budget officials usually play the Grinch in funding fights, sources say Darman had a key role in assuring continued funding after the space agency's Landsat was threatened with extinction this year. NASA officials now count on him to keep their X-30 space plane program alive.

CAMPAIGN FINANCE

Political action committees played it safe like never before in 1988 campaigns. A study by Common Cause found that 274 PACs gave money to both sides in close Senate races, doling out a total of \$1.8 million. In the tight race for one of the Montana seats, more than a third of successful GOP challenger Conrad Burns's PAC receipts of \$316,000 came from donors who also gave money to incumbent John Melcher. PACs also proved that it's never too late to make amends. A quarter of the PACs decided to give money to the winners after the votes were in, having contributed to the losers earlier.

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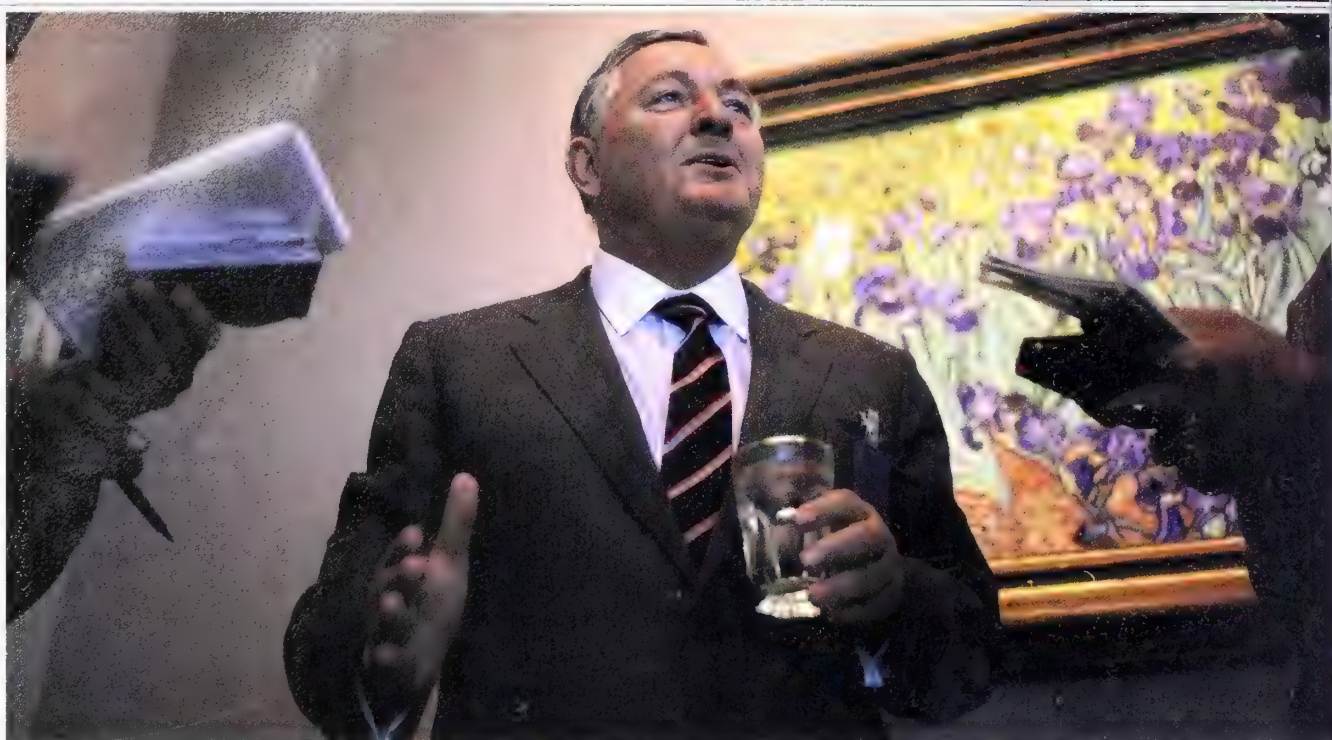
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AUSTRALIA



WILTING: BOND, WITH IRISES, HAS SEEN INVESTOR CONFIDENCE FALL OFF IN THE WAKE OF BAD PRESS

SUDDENLY, ALAN BOND IS LOSING HIS GILT EDGE

The Aussie's empire is besieged. And his cash is getting low

Only last year, Alan Bond was on top of the world. Heading a sprawling empire of beer, media, and natural resources companies, he was honored as a paragon of Aussie tenacity and achievement. The October, 1987, stock market crash apparently washed over Bond. He even made moves on British titans Lonrho and Allied-Lyons. Secure with holdings worth about \$7 billion, the former sign painter peeled off \$54 million to buy Vincent Van Gogh's famous *Irises* and win himself a place among the cultured rich.

But the party is winding down quickly. Over the past few months, Bond's fortunes have taken such a downturn that his empire will have to be severely scaled back. He has found himself overexposed in a world market that is increasingly averse to risk. A major corporate overhaul and even going private are frequently mentioned by his backers.

Speculation is also swirling that Bond, 51, may be forced to sell off some of his splashiest properties, including Australia-

lian TV stations and New York's St. Moritz Hotel. The powerful globe-trotting entrepreneur could find himself trying to "liquidate as much as he can," says a banker close to him. But Bond claims that he has been the victim of "sensationalism and ill-informed reporting." As for his heavy debt load, Bond says that "we have risked criticism because we have been pioneers."

FLAT BEER. Bond's troubles are a black eye for the new breed of aggressive Australian financiers. Rupert Murdoch, Robert Holmes à Court, and Bond all built sprawling global holding companies on pyramids of debt. Murdoch has managed his risks and is growing steadily with his U.S. media properties. Holmes à Court, a swashbuckler, scoured the globe for undervalued companies until the 1987 crash wiped him out. Now that Bond's high-flying days may be over, the Australians could be facing the end of their era.

The vise began to tighten on Bond late last year. Highly indebted, and with big

cash producers such as beer going flat, Bond took a plunge he couldn't afford. He began amassing shares of British conglomerate Lonrho. CEO Roland "Tiny" Rowland counterattacked, issuing a 93-page analysis of Bond's operations, calling them "technically insolvent." Bond refuted the report. But it caused a steep drop in investor confidence. With high leverage, such perceptions can be disastrous, giving lenders more cause to tighten credit. Such wariness also has grounded Bond's sales. Buyers are waiting for better bargains as Bond's troubles mount.

The stock market is jittery too. Bond Corp. Holdings Ltd. share prices fell on the Sydney exchange from U.S. \$1.31 in March to a three-year low of 77¢ in late May before bouncing back slightly. Says Nestor Hinzack, senior analyst with broker Burdett, Buckenridge & Young in Sydney: "Something has got to give."

Bond's credibility crisis reaches well beyond the financial markets. As the Bond group grapples with a major debt restructuring program, it has been hit by a barrage of government investigations. The Australian Broadcasting Tribunal is now deciding whether to revoke Bond's TV and radio broadcast license after findings of ethics violations. Stock regulators are checking the accuracy of his 1988 accounting, while revenue authorities are poring over his tax-avoidance schemes. Bond says he has done nothing wrong, although he has offered

CAN AUDI START WINNING RACES IN THE SHOWROOM, TOO?

As problems with 'sudden acceleration' fade, it steps up U.S. promotion

In recent months, Audi Quattros have flashed to victory in sports car races across the U.S. But the West German company's cars are still viewed as also-rans by many American car buyers—and the Volkswagen subsidiary's U.S. sales have continued a three-year slide. Now, under a new chief executive, Ferdinand Piëch, Audi will try again to become a winner in the showroom.

Piëch is starting from back in the pack in the U.S., and he knows it. Audi, like other European carmakers, was hurt by the '87 market crash and by price increases caused by the weak dollar. But it was also hurt by allegations that mechanical defects made its cars surge out of control. Audi now hopes its image will be helped by several government studies that found no mechanical reasons for unintended acceleration, and it is stepping up promotion. In July, it will bring two successful European models, the Audi V8 and Coupe Quattro, to the U.S.

V8 will be its flagship sedan. Company officials brag that the 3.6-liter engine will have the highest power-to-size ratio of any 8-cylinder engine, and they urge comparisons with such competitors as BMW's 7-Series, Mercedes-Benz's S-Class, and Jaguar's XJ6. Unlike those rear-wheel-drive sedans, the V8 offers all-wheel drive. The Coupe, at some \$30,000, fills a three-year gap in Audi's lineup.

Both cars are supposed to enhance Audi's image. That's the goal of Audi's racing program, too. Up against cars with nearly 100 more horsepower, Audi all-wheel-drive Quattros last year won eight firsts and four seconds in 13 Sports Car Club of America Trans-Am races. Piëch says that such wins boost dealer morale and showroom traffic.

Audi may also lay to rest the unintended-acceleration charges that dog it. In March, the U.S. National Highway Traffic Safety Administration joined agencies in Canada and Japan in ruling



THE MIAMI GRAND PRIX: AUDI IS COUNTING ON TRACK TROPHIES TO REV UP SALES

Despite problems in the U.S., where sales tumbled from 74,100 in 1985 to just 22,900 last year, Audi has been holding its own in Europe. As a result, Audi managed a slight increase in worldwide sales last year, to 423,000 cars. After cost-cutting, the company boosted profits by 25% but still only earned a slim \$78 million on flat sales of \$6 billion.

IMAGE BOOST. The company is making 1989 the turnaround year for Audi in the U.S. But the market is tough. U.S. sales of European luxury cars are off 9% in the first four months, and competition from Japanese models is increasing. Still, Piëch forecasts Audi sales of 30,000 cars for the year, a 30% increase.

He's counting heavily on the two new models. Priced around \$50,000, the Audi

out mechanical defects as the cause of runaway cars, a problem that has also plagued GM, Toyota, Volvo, and others. The NHTSA said the most likely cause was drivers' stepping on the gas pedal instead of the brakes.

Audi, which has redesigned its brake-pedal layout and made other changes, considers itself exonerated by the NHTSA report. But some safety experts think the study is not conclusive. Audi increased its reserve for liability claims by \$125 million last year—\$105 million of it just for the U.S. If Audi wants to restore its good name fully, it may have to win on the racetrack, in the showrooms, and in the courts.

By Jim Treece in Troy, Mich., and John Templeman in Munich

distance himself from his media as-
s through a company restructuring.
While Bond's executives try to fend
the investigators, his biggest prob-
ns are on the corporate front. After
the bad news, executives of Dallhold
vestments, his private company and
a keystone of his diverse holdings, say
ey decided to refinance their debt to
sulate themselves from the weak Bond
rp. share price. More than half of
allhold's \$643 million in assets are
ares in Bond Corp. that have dropped
me 40% in less than a year.

DOUBLED BREWING. Bond's brewing di-
sion, which includes the \$1.3 billion
S.-based G. Heileman Brewing Co.,
e group's main cash cow, is also lag-
ng. U.S. brands such as Old Style and
lt 45 are losing market share, drop-
ng from 8.7% in 1987 to 7.9% in 1988.
at spells problems for the cash stream
(which Bond relies to service his debt,
timated at as much as \$6 billion. And
rlier this month, Australian Ratings,
e local corporate ratings agency,
wngraded Bond Corp.'s credit rating
om B to CCC, in part because of the
id publicity.

Bond's supporters claim that his com-
nies are liquid, if slightly over-lever-
ged. Among Bond's underwriters are
lomon Brothers, Drexel, and National
ustralia Bank. Backers complain that
e media exaggerate Bond's problems
id cut down his successes. Adds John
ond, Alan's 32-year-old son and head of
ond Corp.'s property division: "There
as been a lot of reporting based on
umor and innuendo." Bond's bankers
oint to the recent sale by a subsidiary,
ond Corp. International, of its half-
rare in Hong Kong's Bond Centre for
284 million as evidence of ability to un-
ad assets at good prices.

In late May, Bond lambasted his ene-
ies, targeting Lonrho's Rowland. Last
all, to fend off a Bond takeover, Row-
nd published claims that Bond Corp.'s
ebt totaled \$11 billion, more than twice
e levels in Bond's public statements.
ond refuted the report. Now he wants
ut of Lonrho. He has put his 20% stake,
osting \$610 million, on the block—but
here have been no takers.

The hardest part for Bond may be to
ailor his style to his means. He is
till grabbing properties, from a Hun-
garian brewery to prime Sydney real es-
ate, using whatever cash he can get
rom asset sales. But he can't run much
onger from the fact that his wings have
een clipped. In a hollow gesture, the
ale of his 46-story office tower in Hong
Kong included the condition that the
ame Bond still glow in the downtown
skyline.

*By Stephen Hutcheon in Sydney, with
Mark Moremont in London and Julie Siler
n Chicago*

THE GENIE IS OUT OF BEIJING'S BOTTLE

China's gray old men may not be able to stop students' push for freedom



THE GORBACHEVS AND DENG: A GROUNDBREAKING VISIT MARRED BY PUBLIC EMBARRASMENTS

For five tense days, TV viewers around the world watched transfixed as students took control of Tiananmen Square in downtown Beijing. They humiliated China's leaders by forcing them to greet Soviet President Mikhail S. Gorbachev at the airport, rather than receive him at the Great Hall of the People, as protocol demanded. Then, as meetings with Gorbachev proceeded, fainting hunger strikers with IV bottles attached to their arms were hauled away on stretchers, ambulance sirens screeching. The day before Gorbachev's departure, more than a million protesters marched through Beijing.

The protests that embarrassed China's leaders will have lasting effects, both within China and on the outside world. By rallying public support with demands for democracy, human rights, freedom of the press, and even "doing away with obsolete political ideology," the students may have formed the nucleus of a permanent coalition of opponents to the government.

The students' demands can no longer be ignored, but China's aging rulers are likely to concede minimally and grudgingly. Standing next to the self-confident, vigorous Gorbachev, 84-year-old

top leader Deng Xiaoping slurred words, and Communist Party chief Zhao Ziyang's tired visage only accentuated the difference.

So far both Zhao and Prime Minister Li Peng have ignored student pleas for a direct meeting. They know greater freedom encourages questioning of the party's legitimacy. "If society changes too fast, their ways and means of control are rendered useless," says Zhang Shaoji, an economist at the China Institute for Economic Reforms. Says a young train conductor: "The whole political system needs to change. We need to overthrow the Communist Party."

The liberal Zhao's policy of restraint toward the students may have deepened his troubles. Powerful conservatives are sure to interpret the unrest as the failure of his moderate policies, and despite

Deng's reforms have made more people economically independent—and eager to pursue private enterprise

Zhao's claims that there would be a "settling of accounts" after the Gorbachev visit, China's leaders will be tempted to jail key activists.

The students are only part of the government's problem. Deng's reforms have made many people economically independent of the state, and some workers and private entrepreneurs now support the students. China's largest nonstate company, computer maker Beijing Storage Group Co., for example, is funding a study on constitutional reform.

CONFUSION PAYS. China's private businesses are growing so quickly that they may eclipse the subsidized state sector. Collectives and other private enterprises now account for 37% of China's industrial output, up from only 23% in 1983. At that rate, they will control more than half of manufacturing by 1993. The independently run private companies drive up wages and prices and siphon off scarce electricity, materials, and cash. They provide jobs but pay little in taxes and they corrupt poorly paid government officials. Some trading enterprises are booming by simply buying up steel, color TVs, and other scarce goods at low state prices and reselling them at huge markups on the free market.

Large companies doing business with the government are also in a bind. Heavy subsidies for the loss-ridden state sector have forced Beijing to cancel purchases. Sikorsky Aircraft recently heard that its expected \$180 million sale of some 100 Blackhawk helicopters is on indefinite hold. The cutback also hit General Electric Asia, which was vying to sell up to \$150 million worth of engines for the helicopters.

But smaller, more flexible companies will find opportunities in the confusion. The state is meeting serious shortages of fertilizers, steel, aluminum, and paper by increasing imports. And private Chinese traders and local governments continue to defy Beijing's orders by heavily importing TVs, refrigerators, video cassette recorders, motorcycles, cars, and cameras. In the first quarter of 1989, despite the austerity program, China's imports soared 21%, to \$11.6 billion.

The gap between China's moribund state sector and the private economy only widens each day. Inspired by Gorbachev's *glasnost*, the students have planted the seeds for a future opposition party that would include some workers and entrepreneurs. The Sino-Soviet summit was to cap Deng's career. Instead he may be leaving to the taunts of the young. If so, it would be an unexpected final act for a man whose bold reform reinvigorated a broken nation.

By Dori Jones Yang in Hunan and Dina Lee in Beijing

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REAL REFORM IN JAPAN? DON'T HOLD YOUR BREATH

Former Prime Minister Takeo Miki put a cap on corporate political donations in 1975 after his predecessor, Kakuei Tanaka, had been brought down by a public outcry over lavish political outlays. But that restriction did little to curb unbridled spending by Japanese politicians, who feel they must distribute cash gifts to supporters to get elected and stay in office. For wedding gifts and funeral donations alone, the Diet member of the ruling Liberal Democratic Party estimates that he spends \$434,000 each year.

Such "money politics" has tarnished the nation's image and has triggered a crisis in the LDP. On April 25, Prime Minister Noboru Takeshita resigned after admitting that, along with other LDP politicians, he had accepted gifts and loans from Recruit, a real estate and services conglomerate. On May 17, prosecutors interrogated former Chief Cabinet Secretary Kaio Fujinami about allegations of taking Recruit bribes. Underscoring the political malaise, former Foreign Minister Masayoshi Ito, 75, declined to accept the post as Takeshita's successor. LDP leaders headed with Ito, one of the few top politicians with a reputation for incorruptibility, to take the post in hopes that he could refurbish the party's prestige. But party bosses balked at Ito's demand that they give up their Diet seats to atone for the Recruit scandal and abolish the powerful factions that dominate political decision-making and discourage open debate.

JUSTLY DRINKS. Partly, the party's troubles are rooted in social customs from the past. A typical Diet member, for example, is expected to contribute to 200 weddings and funerals a year at around \$400 each. "People are looking for handouts as though they're still living in some poor farming society," says Yasuhiro Sone, a Keio University political scientist. The government pays few expenses of politicians—enough for just two secretaries, for example, although some Diet members employ dozens. Such costs push an average lower house member's

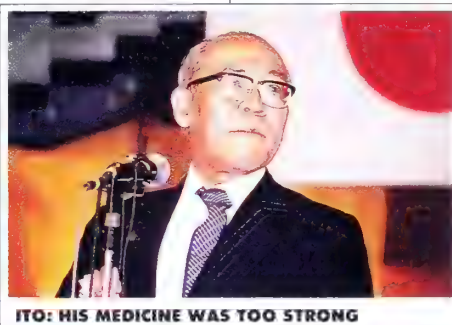
spending to \$1.2 million a year, compared with about \$580,000 that the U.S. Congress allocates to each member for staff salaries and office expenses. To finance such outlays, a favored legal loophole is the fund-raising cocktail party, for which large companies buy hundreds of tickets at \$200 each.

But in the Recruit scandal, money-gathering went well beyond political expenses. Part of Fujinami's \$190,000 profits from Recruit stock allegedly went toward a new private home. With so many top LDP politicians stained by Recruit, younger members have made public their own political financing records and set up a reform group, Utopia. Now, party leaders are shaping legislation to levy stiff penalties on politicians giving out cash at weddings and funerals and require them to disclose contributions they receive of \$4,400 or more, down from the current \$7,300 minimum.

There are many skeptics. "The LDP is not capable of true reform," says Diet member Yohei Kono, who once bolted the LDP to set up a short-lived reform party, then returned. The LDP is reluctant, for example, to redraw electoral districts that give disproportionate political power to farmers and thus keep food prices high, and city voters know it. Disillusioned over stalled reform, some are inclined to support the opposition, such as the Japan Socialist Party, although voters "don't really wish for a socialist government," observes Sophia University political scientist Kuniko Inoguchi.

Knowing that, aging LDP leaders are not likely to give up the old system. So to benefit from basic reforms, voters will probably have to wait for younger politicians to reach positions of influence. What may spur reform in the meantime, however, is the new Japanese emphasis on standards of business conduct shown in last year's crackdown on insider trading. This heightened concern for ethics in the market may eventually spill over into politics.

By Ted Holden in Tokyo



ITO: HIS MEDICINE WAS TOO STRONG

GLOBAL WRAPUP

ARGENTINA

Peronist President-elect Carlos Saúl Menem says he won't try to influence economic policy before taking office on Dec. 10. Until then, outgoing President Raúl Alfonsín will have a hard time making ends meet. Interest payments on Argentina's \$59 billion foreign debt are \$2.9 billion in arrears, and currency markets have been shaken by fears of government default on \$1.3 billion worth of domestic bonds. Foreign reserves are down to \$600 million, and apart from this year's expected \$2 billion trade surplus, all other sources of financing look dry.

Interim Finance Minister Juan Car-

los Pugliese hopes to raise \$400 million by selling six-month bonds to local and multinational corporations. Some, such as IBM, say they will help, but Argentina clearly will need aid from the U.S. Treasury or International Monetary Fund. Lenders, however, will want some idea of Menem's economic policies. In the election campaign, his rhetoric on such issues was vague.

SOVIET UNION

Moscow's Third World allies may soon feel the impact of *perestroika*. A new Soviet debt policy, including some echoes of the U.S.'s Brady plan, will probably be tested on five African nations—Angola, Algeria,

Ethiopia, Libya, and Mozambique—that together owe the Soviets more than \$20 billion. Moscow wrote off about \$5 billion of African debt in the past five years, but now a state company, Sovfintrade, has been authorized to arrange debt-equity swaps.

Moscow also wants to wind down agreements under which Third World countries paid debts in goods instead of cash. These pacts helped dollar-short Moscow obtain commodities without spending hard currency, but now Africans prefer to sell to the West for dollars. Moscow is expected to move toward a Western loan mix: aid on easy terms, bank loans based on market criteria, and short-term trade credits.

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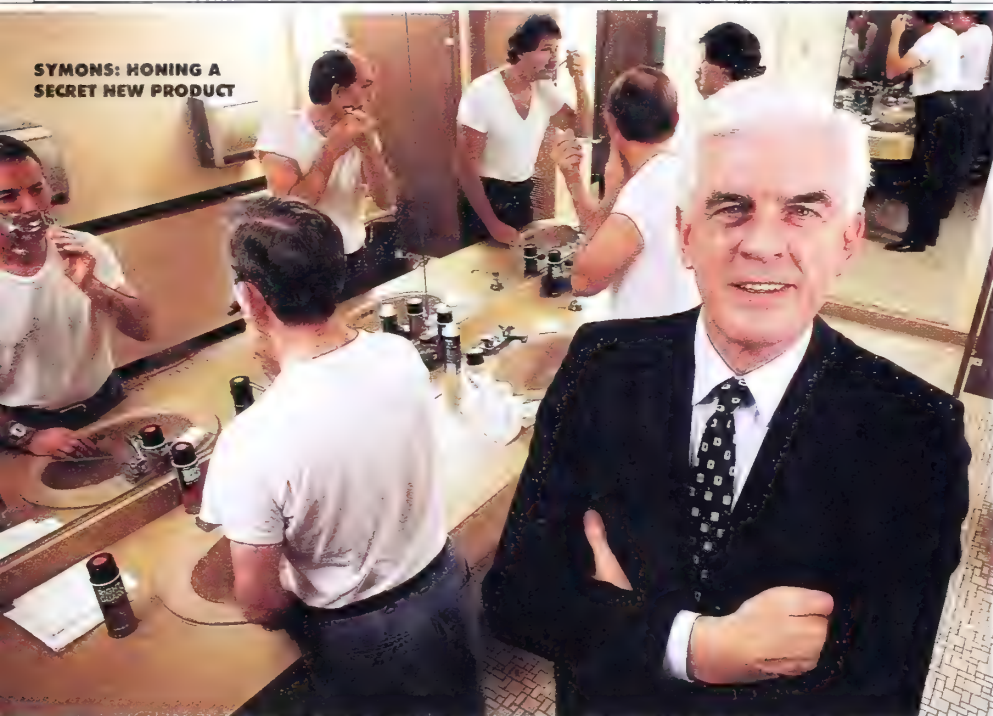


**HEWLETT
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AT GILLETTE, DISPOSABLE IS A DIRTY WORD

It's spending millions to promote high-margin system razors

SYMONS: HONING A SECRET NEW PRODUCT



When Patrick Rice confronts his stubble in the mirror each morning, he reaches for a 30¢ plastic razor. Bic, Gillette, whatever—the shave's O.K., and the 31-year-old production engineer says that one brand is as good as the next. "They're always having these promotions, and you can scoop up 10 of them for nothing."

Gillette Co. hates that sort of talk. It makes about three times as much money per unit on cartridge refills for its Atra and Trac II systems as it does on the Good News disposables that Rice buys. And since the first disposables appeared in 1975, their sales have grown faster than those of system razors—accounting now for 40% of the dollars spent by men on shaving products.

'A FORTRESS.' That's why Gillette is spending \$63 million this year, and much more after that, to make Patrick Rice switch to Atra. It also wants to sell him shaving cream, after-shave lotion, and deodorants—all under a single brand name. "We can build a fortress," says John W. Symons, the 59-year-old Londoner who arrived in Boston a year ago

to head Gillette's shaving operations.

Gillette appears to have learned a few things from the raiders who forced a wrenching restructuring and thousands of layoffs since 1986. The message from Revlon Group Inc. and then from Coniston Partners was powerful: Cut costs and broaden the franchise created by the powerful Gillette brand name.

The directive has taken on increasing

urgency as Gillette searches for new profits. In the nine months since it negotiated a standstill agreement with Coniston, Gillette has stayed clear of takeover threats. And the results look good: The company made \$268.5 million last year, up 17% from 1987, on sales of \$3.58 billion. But growth is uncertain. Its toiletries and cosmetics group, locked in price-sensitive, low-margin shampoo and deodorants, continues to produce lackluster results. Cost-cutting has yielded striking improvements in the stationery-products group, which makes Paper Mate pens and Liquid Paper correction fluid—but that unit accounts for just 9% of total profits.

TWICE THE PRICE. That means Gillette has to squeeze new earnings from blades and razors, which already produce two-thirds of the company's profits. It wants to convince men that system razors give a shave worth twice the price of disposables. That's the thinking behind the upbeat, unabashedly masculine new TV campaign for the premium Atra system that made its debut on Jan. 1. The message: "Gillette: The best a man can get."

Consumer Reports concurs that razor systems are superior. In its May issue, 500 men rated Gillette Trac II the best of 24 products. In June, Atra came in third. The top disposable, Gillette's Good News, was only No. 10.

So far, though, men haven't bought Gillette's new line. The company says that sales of its system cartridges rose 20% in this year's first three months—mainly because it stepped up efforts to penetrate grocery stores. But retailers and distributors contacted by *BUSINESS WEEK* say systems are selling at about the same rate as they did last year. So are disposables.

Indeed, Gillette's move has its risks. A similar strategy worked for Symons in Europe. But in the U.S., he'll have to steal about 10 percentage points of market share from competitors or persuade 5 million Good News customers to switch to systems to justify his biggest ad budget. That at a time when competitors are flooding retailers with new products—both systems and disposables.

But many analysts believe John Symons is just the executive to pull it off. The man behind Gillette's new direction is a departure from the company's staid, low-profile tradition. Handsome and outgoing, Symons seems to bask in the public spotlight. He left the London police force at age 25 to sell instant coffee for Nestlé. He landed at Gillette's London

AN EDGE IN RAZORS



▲ PERCENT OF U.S. DOLLARS SPENT ON SHAVING DEVICES

DATA: A. C. NIELSEN CO., GILLETTE CO.

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Association



First Anniversary



Second Anniversary



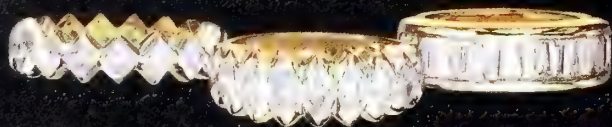
Third Anniversary



Fourth Anniversary

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*From Database Magazine

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headquarters in 1965 as a regional sales manager and took charge of Europe 10 years later.

In North America, Symons is putting nearly all the shaving division's ad dollars behind systems. As recently as two years ago, the group spent 70% of its budget on disposable razors. Symons is also standardizing packaging and advertising across the shaving product line and throughout North America and Europe. The idea is to pave the way for a series of new shaving products from Gillette in the next two years.

COY HINTS. The most important new offering is a system razor set to debut early next year. Gillette has spent a lot of money on this one: Shearson Lehman Hutton Inc. analyst Andrew Shore put capital expenditures at more than \$100 million in the past two years. Gillette has earmarked an additional \$100 million for advertising in 1990. Except for a few coy hints, though, the company has been secretive about its new product: In its sprawling South Boston factory, guards patrol an eight-foot-high wall surrounding the pilot manufacturing line.

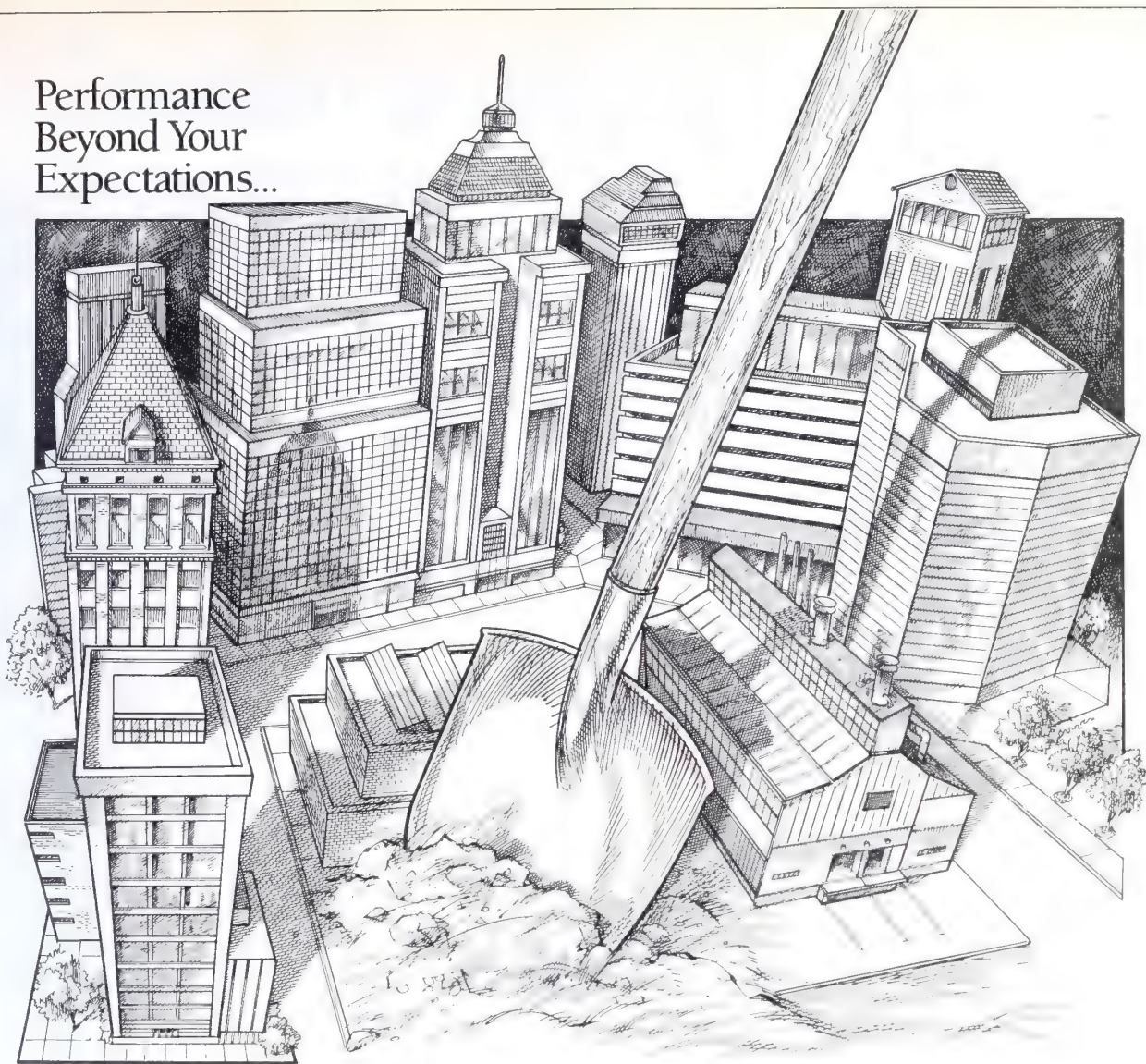
Rumors abound: Some talk of a slimmer shaving head or a ceramic blade. Norman R. Proulx, president of Wilkinson Sword North America, has heard talk of an independent, floating blade—something he says he can't fathom. Others think it might be a pivoting head that adjusts to facial contours.

Retailers are wary of all the competition. "We would love to ring up \$5 instead of 99¢ at the register," says one drug-chain buyer. Retailers make more money on system refills than they do on disposables. And disposables take up more room on the display racks. But retailers also promote disposables heavily to bring customers through the doors. So they're sensitive to action that might disrupt that business. Buyers also know they can't bully a company that supplies the lion's share of a very profitable product. "The trade does what we tell them," says Symons.

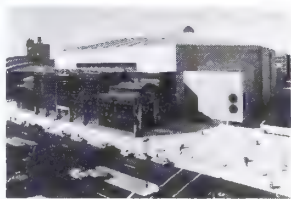
Even those with misgivings offer good odds that Gillette's big bet will pay off. "It's a classical share-shift strategy, and it can work," says Gary M. Stibel, principal of New England Consulting Group. The shaving converts may turn up soon. Ronald Conarroe, a 35-year-old stockbroker in New Canaan, Conn., says he will try Atra as soon as he exhausts the supply of Good News sitting in his medicine cabinet. "If they can replace me in there, they've got me for 10 years," says Conarroe. Now, that's the sort of talk a shaving company can feel good about.

By Keith H. Hammonds in Boston, with bureau reports

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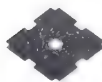
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JAN BELL: ON THE CUTTING EDGE OF WHOLESALE JEWELRY

Isaac Arguetti, chairman of Jan Bell Marketing Inc., grabs a tray labeled with computer codes and loaded with \$30,000 worth of sapphire rings. "We track these from stone to finished product," he says. Computerized inventory control, he adds, is what separates Jan Bell from the rest of the trade. Hot growth is another. The distributor's earnings have grown at an average 86% annual pace over the past three years, to \$9.3 million last year on sales of \$120 million. In fact, success has stretched management thin, so it recently brought in Michael Poole, jewelry manager for discounter Reliable Stores Inc., as chief operating officer.



POOLE: BIG DISCOUNTS, BIG PROFITS

in Michael Poole, jewelry manager for discounter Reliable Stores Inc., as chief operating officer. The formula: Instead of marking up jewelry by the usual 200% or more, the company sells through wholesale price clubs, at a 17%-to-20% markup. The clubs add just another 10% to the price. Jan Bell's cost on a three-quarter-carat diamond-cluster ring, for instance, is about \$400. Members get it for a mere \$499. Jan Bell relies on high volume, rapid turnover, and controls that keep expenses at just 5% of sales. "They are successful," says Sam Laor of Samo

jewelry in New York, "because they buy straight from the markets and cut out middle guys." Samo assembles jewelry for Jan Bell. It helps that sales of the price club industry—now at \$14 billion—are growing in 30% annual spurts. These clubs, with such members as schools, churches, and credit unions, sell all sorts of merchandise at cut-rate prices. Jan Bell supplies 75% of the 327 clubs in the U.S. Therein lies the rub for investors: The stock, at 23½, is selling at a lofty 20 times estimated 1989 earnings. But Jan Bell is vulnerable to a slowdown in the wholesale club industry. When that happens, as it inevitably will, Jan Bell's stock may not be such a gem.

By Antonio N. Fins in Fort Lauderdale, Fla.

IRIS: PERFECT PROOFS BEFORE THE PRESSES ROLL

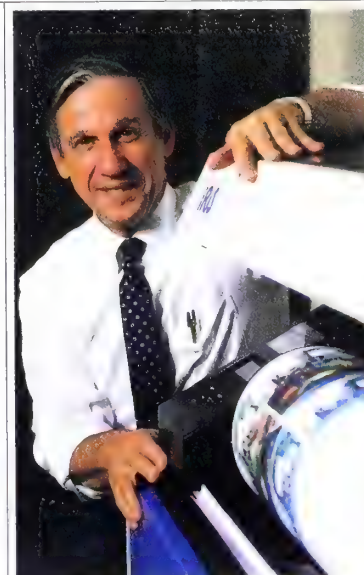
Alphonse M. Lucchese loves a challenge. When he left desktop publisher Xyvision Inc. in April, 1987, to become chief executive of Iris Graphics Inc., Iris' coffers held less than three months' worth of cash. Lucchese promptly decided to abandon Iris' slow-selling printer and throw the company's remaining resources behind a new ink-jet model that was still in development.

The 3024 printer, introduced in September, 1987, has a lucrative niche. It is used to make highly accurate color proofs before press runs—to show an advertiser, for instance, how an ad will appear in a newspaper, or a textile house how a fabric design will look. Architecture firms use it to produce pictures

of computer-generated designs of buildings. Iris claims that its process, which prints directly onto the paper or fabric to be used, is a more accurate reflection of the final product than other pre-press offerings—typically reproductions on film. Textile house MAST Industries says it has been able to grab new business by using the 3024 to show, among other things, what a particular skirt design will look like in an array of colors.

Instead of trying to sell machines directly to customers, Lucchese decided to market them through more established makers of pre-press systems. The result: In 1988, Iris sold 120 of its new 3024 model at about \$75,000 each. Sales jumped to \$6.8 million from only \$900,000 in 1987. The company has been profitable since last August, after posting a \$2.4 million loss in 1987. Industry researcher CAP International projects that the market for pre-press graphics services such as Iris' will grow to over \$1.2 billion by 1992, from \$200 million today. "We are going to ride that wave," says Lucchese.

By Laura Jereski in Bedford, Mass.



LUCCHESE: PRINTING IT ON THE 3024

TRENDS

SMALL BUSINESS HAS MERGER MANIA, TOO

It's not just mammoth public companies that are propelling the current boom in mergers and acquisitions. Since 1981, 56% of reported private deals were valued at less than \$10 million, according to consultant Geneva Cos., which monitors M&A activity for private companies with revenues ranging from \$1 million to \$100 million.

Despite fears of inflation, the pace isn't slowing this year, either. Based on first-quarter activity, Geneva estimates that as many as 18,500 small private companies will do M&A deals in 1989, up 12% from last year.

Favorite targets include steady performers in light manufacturing, service outfits such as those that provide temporary help or secu-

rity guards, and such recession-resistant businesses as food processors and equipment lessors.

Spurred by relatively healthy economic conditions and lots of offshore buyers, it's a seller's market, says Geneva Vice-Chairman Arthur D. Perrone Jr. When will the party end? Late next year, he predicts.





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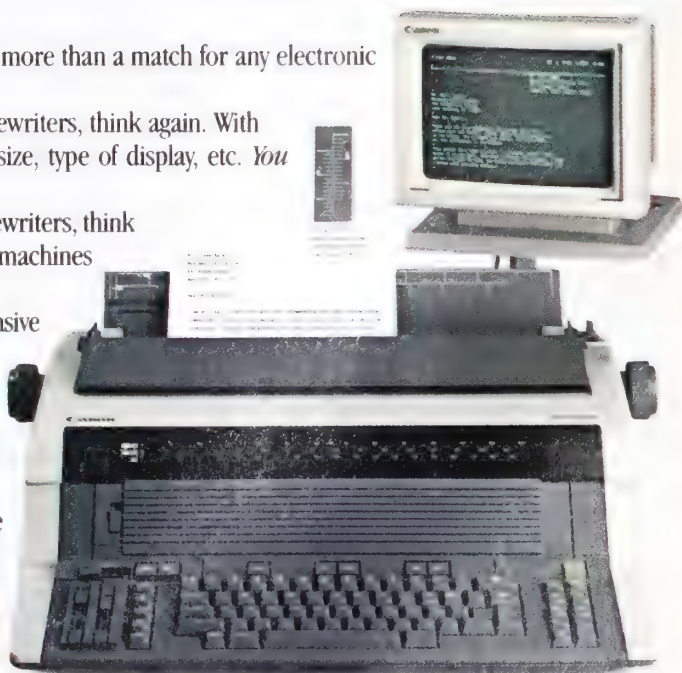
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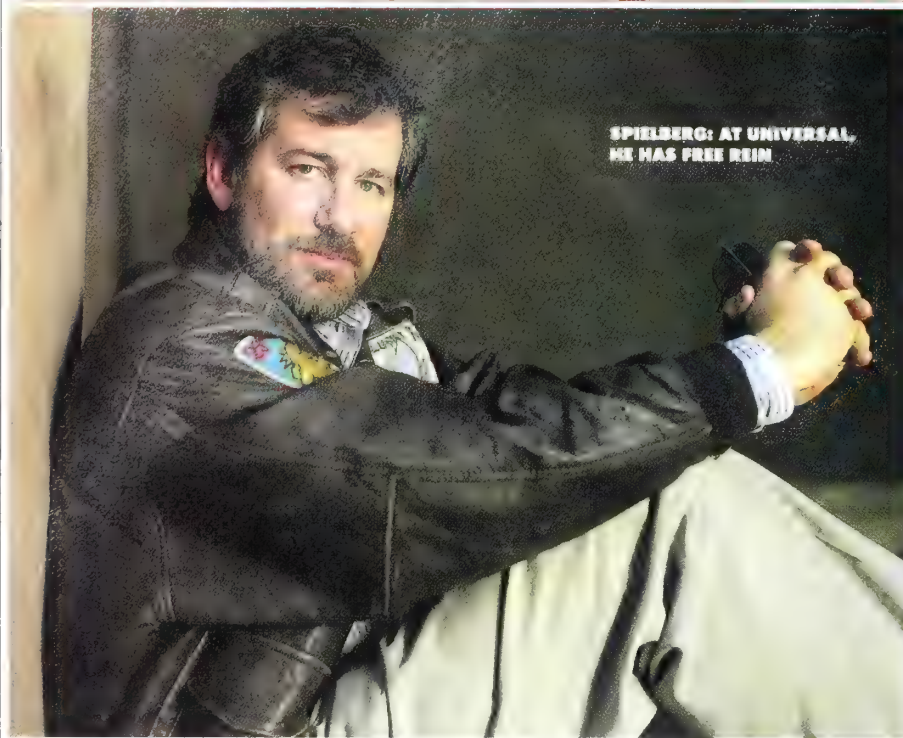
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SPIELBERG: AT UNIVERSAL, HE HAS FREE REIN

MOGULS

FEAR NOT, HOLLYWOOD: GOLDEN BOY IS STILL GOLDEN

After a lull, Steven Spielberg is poised for a string of megahits

He is fabulously rich, a celebrity everywhere movies are shown, and unquestionably the most powerful filmmaker in Hollywood. But you won't catch Steven Spielberg power-lunching at Spago or hobnobbing with movie stars at the Vertigo disco. For fun, he most likes to curl up alone with his vast collection of video games. And his idea of socializing is doing Donald Duck imitations for his 3-year-old son, Max. Says Sidney Ganis, president of Paramount Pictures Corp.: "Part of Steven's brilliance is that he has never had to grow up."

It shows. Springing from his boyish imagination, Spielberg's best-known movies teem with fantastic gadgets, visitors from outer space, and scary things that go bump in the night. The only thing grown up about them is the money: He has produced or directed 5 of Hollywood's top 10 box-office hits, including *E. T. The Extra-Terrestrial*, the all-time leader, with \$367 million in U.S. sales and nearly double that worldwide. Last year's release of *E. T.* on videocas-

sette brought in more than \$360 million in sales. In all, Spielberg's 25 films have sold more than \$2 billion worth of tickets around the world.

Yet not long ago, it seemed as if Spielberg, 41, might have lost his golden touch. His 1985 television show, *Amazing Stories*, suffered from sickly ratings before NBC pulled the plug in its second season. In 1987, his more serious *Empire of the Sun* won some critical acclaim but was a disappointment at the box office. Industry insiders also began to grumble that he was trying to bank on his name by acting as executive producer on such lackluster fare as *Harry and the Hendersons*, *Innerspace*, and *Batteries Not Included*. For those box-office duds, Spielberg only approved the projects before turning over production and direction to others.

Now, like the maniacal shark he created in 1975's *Jaws*, Spielberg is back with a vengeance. Last year, he produced the smash hit *Who Framed Roger Rabbit* for Walt Disney Co. With U.S. receipts of \$153 million, it was the top-selling

movie of 1988. This year promises an even bigger splash: On May 24, Paramount Pictures will release *Indiana Jones and The Last Crusade*, the third installment of the blockbuster adventure series Spielberg has directed. This one stars Sean Connery as Harrison Ford's father. And down the road, there are other likely winners. By this time next year, Warner Brothers Inc. will have released a sequel to *Gremlins*, a 1984 hit he produced, while Universal Pictures will have finished two more incarnations of the Spielberg-produced 1985 smash *Back to the Future*.

THEME PARKS. Has Spielberg simply turned his Amblin Entertainment into a sequel factory? In a sense, yes. Churning out retreads is a safe and easy way to make money. Even the Universal movie he began directing in mid-May, *Always*, is a remake of an old MGM film *A Guy Named Joe*. But there are also a few new ideas on his plate: He has a multimillion-dollar contract to design attractions for Universal Studios' two new theme parks in California and Florida, and he's plotting another run at television production. He recently hired Carol Kirschner, a former CBS Inc. programmer, to run Amblin's TV unit, which has begun to produce a new cartoon show for Warner. Spielberg, who is in the middle of a divorce from actress Amy Irving, declined to be interviewed.

Despite his commercial success—perhaps because of it—Spielberg gets little respect from his peers. Apart from a special citation for achievement in directing, he has been snubbed by the Academy Awards. In a highly unusual move, the Academy even declined to nominate him as Best Director for *The Color Purple* when the movie was up for Best Picture honors. But the studios aren't complaining. Like David O. Selznick and Samuel Goldwyn before him, Spielberg can pick the projects he wants—and he can choose from among any of the seven major studios to make them. Says Steven J. Ross, chairman of Warner Communications Inc.: "I'd take anything that man does."

Spielberg and his 30 full-time employees work their magic from a sprawling complex on the Universal lot. His touch is everywhere: Outside there is a small wishing well that, on close inspection, features a *Jaws*-like shark. Inside the main screening room, there's a candy counter and fresh popcorn. He leaves much of the business side to others so he can concentrate on making movies. But even that is difficult at times. In 1985, when he was directing *The Color Purple* in North Carolina, he had the daily footage of *Amazing Stories* airlift-

in so he could keep tabs on the program. He also gets involved in every aspect of marketing his films, from editing "trailers" that play in theaters to overseeing marketing tie-ins. Spielberg can be extraordinarily demanding and stubborn. Five weeks into production of *Back to the Future*, he was unhappy with the performance of Eric Stoltz in the lead role and hastily replaced him with Michael J. Fox. The switch cost an estimated \$4 million, since Spielberg had to reshoot a number of scenes. But no one dared stop him. "He knows what he wants and won't change no matter what anyone says," notes Columbia Pictures President Dawn Steel, who worked with Spielberg when he was at Paramount. "Who's going to argue with his track record?"

carrying his father's briefcase, Spielberg strolled onto the lot, occupied an empty office, and pretended he was a Universal executive. He was eventually found out and asked to leave. But a few years later, Universal hired him to direct TV shows after seeing his short film, *Amblin*, which he made while attending California State University at Long Beach. His star rose quickly. In 1973, the 25-year-old Spielberg directed *Duel*, a made-for-TV movie that later became a hit in foreign theaters. He went on to make four of his first five movies at Universal, including *Jaws*.

At Universal he also met George Lucas, who was then directing *American Graffiti*. Today, the two are close friends as well as occasional business partners. Lucas is the producer of all

These days, Spielberg is paid more than any director or producer in the industry. Last year, he turned down \$5 million to direct *Rain Man*, this year's Academy Award-winning movie, citing other commitments. Studios pay him a minimum of \$1 million to produce a film, and Hollywood sources say he usually brings home at least 10% of the movie's profits. His take from sales of *E. T.* videocassettes alone is estimated to exceed \$40 million.

A Spielberg movie invariably costs a lot to make, too. After he did *Jaws* for a measly \$8 million, every Spielberg project has taken on epic stature. Budgets generally run \$35 million or more. *Roger Rabbit*, initially budgeted at \$27.5 million, cost Disney more than \$45 million after Spielberg urged the studio to put



INDIANA JONES AND THE LAST CRUSADE, FANS MEET HARRISON FORD'S DAD, SEAN CONNERY

Spielberg doesn't hesitate to throw his eight around off the set, either. Even once Columbia Pictures rejected his idea for *E. T.* in 1980, he has refused to make a movie for the studio. And while Universal spent \$6 million to build a headquarters for Amblin in 1984, *Always* is the first movie he has directed there since 1982. Sources say that's because he didn't like Universal's two former presidents, Ned Tannen and Frank Price. They couldn't be reached for comment. But Thomas Pollock, the current president, knows the importance of keeping Spielberg happy: "One of the most important things I can do in this job is to make sure that Steven wants to work with us." Pollock has essentially given him free rein, and Spielberg has greed to make five films for Universal. It's fitting that Spielberg is working with Universal again. In the late 1960s, he was a gawky teen from Scottsdale, Ariz., took the Universal Studios Tour. The next day, wearing a business suit and

three *Indiana Jones* movies. Other close friends include MCA President Sidney Jay Sheinberg, whom Spielberg considers a father figure, and Ross of Warner. When some shareholders didn't want to renew Ross's hefty contract in 1987, Spielberg stood up at a shareholders' meeting and threatened to boycott Warner if Ross left. "If Steven Spielberg is your friend, you count yourself blessed," says Ross.

Now worth an estimated \$250 million, Spielberg has four spacious homes around the country, including a 20,000-square-foot mansion in Pacific Palisades. He and Irving bought the property in 1985 only to tear down most of the existing house—once owned by Selznick—and build a new one for \$4 million. In its "Hobbit room," where the windows are shaped like mushrooms, there's a wall-size TV and a soda fountain. In the game room, there's a row of video games. The "Rosebud" sled from *Citizen Kane* hangs over the mantle.

SPIELBERG'S BOX-OFFICE BONANZA

Steven Spielberg has produced or directed 5 of the 10 top-grossing movies in Hollywood's history (in red)

Film	U.S. box-office receipts Millions
E. T. THE EXTRA-TERRESTRIAL (1982)	\$367
STAR WARS (1977)	323
RETURN OF THE JEDI (1983)	263
JAWS (1975)	260
RAIDERS OF THE LOST ARK (1981)	242
BEVERLY HILLS COP (1984)	235
THE EMPIRE STRIKES BACK (1980)	223
GHOSTBUSTERS (1984)	220
BACK TO THE FUTURE (1985)	207
INDIANA JONES AND THE TEMPLE OF DOOM (1984)	180

DATA: ENTERTAINMENT DATA INC.

in more special effects. *Gremlins* was to be a low-budget horror film, says Joe Dante, the director. "I'm not even sure Warner was all that committed to the film," he recalls. "But Steven saw a big movie in this, and he convinced them." That gamble paid off when the movie, budgeted at nearly \$25 million, returned a profit of more than \$80 million from U.S. ticket sales alone.

Thanks to his collection of sequels, Spielberg can probably count on more big returns through this year and next. What happens after that is anyone's guess. Amblin executives say he intends to keep playing executive producer, which could result in more flops like *Innerspace*. And soon he'll start producing television pilots, raising the possibility of another not-so-amazing series. But try to find a studio chief who wouldn't happily take a chance on Spielberg. Although he has his ups and downs, in Hollywood he's still the closest thing to a sure bet.

By Ronald Grover in Los Angeles

THE CULTURAL REVOLUTION AT A.O. SMITH

Giving the shop floor a say wasn't easy, but it's paying off



TEAMWORK: DEFECTS
FELL FROM 20% TO 3%

In the early 1980s, life on the shop floor at the A. O. Smith Corp. automotive works in Milwaukee typified everything that's wrong with work relations in the U. S. Union stewards argued over work rules with dictatorial foremen. On assembly lines, bored workers repeated the same robotlike tasks every 20 seconds, welding and riveting car and truck frames. No one paid much attention to quality. With wages based partly on piecework pay, everybody hurried to "get 'em out the door, junk or not," remembers assembler Rich Davis. In 1981, 20% of the frames produced on a Ford Ranger line had to be repaired before they were shipped.

That year, Smith's Automotive Products Co. embarked on an odyssey of workplace changes—hoping to revitalize itself through employee involvement (EI). The company and its unions found that low-level EI programs such as quality circles—off-line discussion groups that suggest ways of improving quality and cutting costs—couldn't reform Smith's hoary work practices. That would require radical changes in how work is organized and managed.

It took six long years. But finally, in 1987, Smith took the big step and began reorganizing workers into production teams that, for all practical purposes, manage themselves. The results were dramatic: In 1988, the productivity

growth rate doubled, and defects on the Ranger line were down to 3%.

What A. O. Smith and its unions accomplished is a rarity in American industry: They transformed an old manufacturing complex with long-settled work rules, customs, and a history of labor-management warfare into a totally new factory system. "You need a cultural

when competitive pressures began force major changes. First, Smith's Big Three customers—themselves suffering from the onslaught of imported Japanese cars—pushed A. O. Smith and other parts suppliers to improve product quality. Smith management responded by unilaterally setting up quality circles to elicit suggestions from workers. But the unions refused to get involved, and the program began to fade without a major boost in quality.

By 1984, Smith had run into other problems. General Motors Corp., once its largest customer, began to reduce purchases of full-size car frames as it switched to front-wheel drive. Smith's seven unions then agreed to join management in an EI process designed by Sidney P. Rubinstein's Participative Systems. This system, which consisted of problem-solving committees on the shop floor, advisory committees with union representatives at the plant-wide level, and a top planning committee with union and management officials. In this system, the unions gained considerable influence in daily decision-making. What's more, Paul Blackman, the president of A. O. Smith Steelworkers Local 19806—the largest union, with 81% of 3,200 hourly workers—gained a voice in making strategic business decisions at the companywide level.

'PROGRAMMED.' But these reforms still hadn't fundamentally changed conditions on the shop floor. Alienated workers still lifted, welded, and riveted on 20-second cycles, and absenteeism was as high as 20% on some days. Meanwhile, the old piecework pay plan—which rewarded only quantity—resulted in an extraordinary amount of bad product. Quality was so poor that the company had to station workers at the end of the lines to repair frames that weren't built right the first place.

In 1986, the Big Three automakers forced all suppliers to cut prices, a move that cost A. O. Smith many millions of dollars. Then, a decline in orders forced a layoff of 1,300 workers in late 1987. Although management never threatened to close the Milwaukee operation, Blackman believed

was "unrealistic" to assume that Smith would keep it open without further changes in work practices. Some unionists opposed such a move, but Blackman thought that "to remain the same is to invite yourself out of a job."

Negotiating new contracts in 1987, the two sides eliminated the piecework pay system that had existed for some 50 years. By itself this would have cut pay by as much as \$3 an hour. But instead

HOW A.O. SMITH DID IT

Type of reform	Results
1981-84 Quality circles started by management without union support	Quality improves. But program suffers from lack of union involvement
1984-87 Problem-solving committees formed jointly by unions and management	Hostile attitudes begin to change on both sides. More improvement in quality
1987-89 Work teams set up throughout plant. Unions involved in decision-making	All workers involved in raising quality. Productivity growth rate doubles in 1988

DATA: BW

change that can't be legislated by contract or law," says Sidney P. Rubinstein, president of consultant Participative Systems Inc. in Princeton, N. J., which advised Smith's management and unions. "The people have to want to make the transformation, and it must evolve from their own experience."

The Milwaukee employees wanted most of all to save their jobs. Fears of a shutdown dated from the early 1980s,

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the company agreed to freeze earnings at the current rate for four years rather than asking for an immediate pay cut. That softened union opposition. "I saw cooperation as a union-busting scheme until 1987," says grievance committee-man William French. "What started to convince me that they were serious was that they didn't ask for concessions."

Equally important, Blackman persuaded the company to install the work-team concept. Usually, it's management that must persuade a union to accept the flexible job assignments required by teamwork. But Blackman, the president of Local 19806 for 15 of the last 17 years, had solid political support to push for an expanded participatory role for workers. "I was anxious for our people to take control so we could get all the people involved in building a quality product," he explains.

'I LOVE IT!' The work teams consist of five to seven workers who rotate from job to job. The members elect team leaders who assume many managerial duties, such as scheduling production and overtime, ordering maintenance work, and stopping the line to correct defects. Most rank-and-file workers don't object to the added duties, and their increased power on the shop floor is no illusion. They even get to revise work standards set by engineers. "They just turned control of the shops over to us," says steward Charles Perkins. "Our destiny is in our own hands. I love it!"

With hourly workers taking over managerial tasks, Smith retired or fired scores of first-line foremen, reducing the ratio of foremen to workers from 1 to 10 in 1987 to the current 1 to 34. While this reduction enabled Smith to cut overhead costs, it also undermined the morale of the remaining supervisors. Belatedly, the company is now training them to put aside their old management-by-control methods and adopt a participative style that suits Smith's new culture.

All is not sweetness and light at the Milwaukee works. "We're pleased with the amount of change that's occurred," says Randy White, human resources vice-president of Smith's automotive company. "But we want to be world-class by every measure, and we're not there yet." Meanwhile, management and labor still clash over tough issues. The company wants an easing of restrictive seniority rules, and the unions are demanding that all current workers be guaranteed lifetime employment.

That's not right around the corner. But in mid-April, most workers received a \$123 payment under a newly negotiated profit-sharing plan. Not a large bonus, but it represented a partial reward for transforming an obsolete production system into a competitive one.

By John Hoerr in Milwaukee

Marketing

CONSUMER PRODUCTS



REYNOLDS' TINTED PLASTIC WRAP DIDN'T IMPRESS MEN—BUT IT'S A HIT IN THE STORES

CAN REYNOLDS WRAP UP THE KITCHEN MARKET?

The aluminum giant bolsters its stake in plastic packaging

When Reynolds Metals Co. decided to roll out a new line of colored plastic food wrap in transparent shades of red, green, yellow, and blue, it faced a marketing challenge. Research showed women loved the stuff, but men didn't see the point—and the purchasing staffs of supermarkets are mostly men. So Reynolds sent samples to the buyers' homes, hoping their wives' reactions would convince them the product would sell. The strategy helped. After 10 weeks, colored Reynolds Plastic Wraps are in stores in 75% of the country, and sales are exceeding expectations.

If the name Reynolds Metals brings to mind a boom-and-bust aluminum company, look closer. The Richmond (Va.) company is turning into a savvy consumer products marketer as well. While the bulk of its \$5.6 billion in sales comes from the aluminum used in cans and buildings, Reynolds has built a thriving \$500 million sideline in products used to cook today's

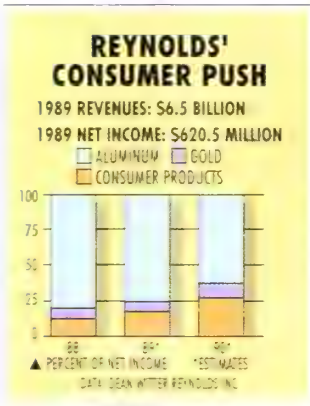
turkey and wrap yesterday's pot roast.

The most recent addition to the Reynolds family is a line of plastic resealable food-storage bags introduced in April. The company already has leading market shares in wax paper, cooking bags, and aluminum foil. Now, Reynolds

is considering brand-name trash bags, plastic cups, and utensils. "We want to own that aisle" in the supermarket, says Chairman William O. Bourke.

Bourke's strategy is to rely on consumer goods to smooth out the inevitable earnings swings in metalmaking. Sales of packaging products tend to rise during economic crunches because consumers are more likely to prepare their own food.

And Reynolds' wraps, bags, and foil carry pretax margins as high as 40% compared with 7% to 12% for aluminum. Consumer products contributed only 12% to Reynolds' \$482 million in earnings last year, estimates J. Clarence Morris, an aluminum industry analyst at Dean Witter Reynolds Inc. But he forecasts that





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Marketing

net profits from consumer products, including bulk sales to food-service businesses, will increase 330%, to \$196 million, or 26% of total earnings, by 1992.

For Reynolds to realize such results, it must open markets that are under pretty tight wraps. In the \$350 million reclosable plastic bag business, Dow Chemical Co.'s Ziploc has a 75% share, and First Brands Corp.'s Glad claims most of the rest. To defend their products, Dow and First Brand offered discounts and rebates weeks before the Reynolds brand hit the stores.

BASHED BORSCHT. Reynolds budgeted \$60 million to develop its triple-seal bags, including about \$20 million for ads. TV spots that highlight their strength show how to make such concoctions as "bashed borscht"—put beets in a bag and smash them with a bat.

Reynolds is no newcomer to the supermarket. Former Chairman David P. Reynolds virtually created the aluminum foil business—and one of the most dura-

ble brands in Reynolds Wrap—by spending heavily on national TV advertising in the 1950s. But the company didn't put its name on another consumer product, plastic wrap—until 1982, a year after Bourke arrived from Ford Motor Co. Seven years later, Reynolds commanded 19% of the \$250 million plastic wrap market. With the colored wrap, Bourke vows, Reynolds will vault into the No. 1 spot, ahead of Dow's Saran Wrap, which has 26%. Bourke's goal: to reach \$1 billion in consumer product sales by 1992.

Bourke frets that investors haven't recognized the value of Reynolds' consumer businesses. The company's stock, at around 56 a share, has been trading at only six times earnings, half the average for the Standard & Poor's 500 industrial companies. "I guess the market won't be convinced until the next recession," Bourke says. If profits hold up, there can be little doubt Reynolds' move means more than just aluminum.

By Michael Schroeder in Richmond, Va.

MOBIL IS WAGING A HEFTY WAR ON 'WIMPY' WASTEBASKETS

Reynolds Metals isn't the only old-line industrial company aiming to extend its reach in the home. After 20 years of making Hefty trash bags, Mobil Corp. is going after the \$300 million-plus wastebasket business. In April, Mobil Chemical began bombarding the public with TV ads for its new Hefty Designs line. Offering an array of upscale new options, the company aims to bag 20% of the market with its Hefty solution to "wimpy" trash cans.

As a leader in trash bags, Mobil knows its garbage. The company sifted through a heap of consumer waste-container concerns in order to create five versions of the perfect wastebasket. Some models open with one step on the pedal and close with another. Others have a "retainer ring" that keeps the trash bag from slipping and eliminates "ugly overhang." There's even a handy attachment for storing a box of replacement bags. Mobil has invested some \$5 million in ads and promotions, including a special mailing to Mobil credit-card holders.

SPACE WOES. The push brings Mobil smack up against Rubbermaid Inc., the undisputed king of the heap. One of the first makers of plastic wastebaskets, Rubbermaid has long had a firm hold on the plastic housewares market. Last year, the Wooster (Ohio) company

sold \$457 million worth of dishpans, laundry baskets, containers, wastebaskets, and other consumer products, estimates Kidder, Peabody & Co. Mobil may have a hard time persuading retailers to take shelf space away from Rubbermaid and make room for Hefty. "Hefty Designs is bulky, and you need several different colors and sizes," says Richard D. Green, a buyer with Duckwall-Alco Stores Inc., a discount chain. "I just don't have the space."

Mobil has put itself at the high end of the market, targeting people who want to "upgrade" their kitchen can. Retail prices reach \$19.99 for Hefty's top-of-the-line wastebaskets, compared with \$17.99 for Rubbermaid's. Mobil is betting that consumers will pay more for a product that does more. "I think Rubbermaid was positioned on things a wastebasket didn't do—rust, break, etc.," says Hefty's Andrew U. Ferraro, manager of new ventures at Mobil Chemical Co. "We are trying to add value on what it does do."

Of course, Hefty Designs' projected \$20 million to \$30 million in 1989 sales is just a drop in the plastic bucket for Mobil Corp., which had revenues of \$5.5 billion last year. But with Mobil facing a heavyweight competitor like Rubbermaid, even those modest revenues aren't in the bag yet.

By Maria Mallory in Wooster, Ohio



A circle of friends

Kinnevik was founded by friends and has been brought forward by their sons. Agriculture was our first business. Investments in the mining and forestry industries were added shortly thereafter.

Our human tradition is unbroken and most of what guides us comes from our origins. Like a good shooting party our organization has few spoken rules. However, ex-

ceptions are rare. The characteristics we seek among ourselves are faithfulness, warmth, openness and helpfulness. In fact, the same characteristics you seek amongst your friends. Trust can neither be given nor taken, it can only be earned. Our original businesses offered few opportunities for short cuts. The earnings were seldom sufficient for quick improvements. Re-

wards often came years after the initial effort. Common sense went a long way, but patience and far-sightedness were prerequisites.



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A BOLD MOVE IN MAINFRAMES

IBM PLANS TO MAKE THEM KEY TO NETWORKING—AND SO RESTORE ITS GROWTH

It's the big question in computer circles and on Wall Street, too: Are IBM's glory days gone forever? Will the company ever get back to the growth it enjoyed in the early 1980s, when both revenues and earnings nearly doubled in five years? Back then, IBM's strength was in mainframes, which produced about 50% of its revenues and nearly 70% of its profits. With 60% of the world mainframe market, IBM looked impregnable. Personal computers were still toys, engineering workstations were a lab curiosity, and neither of them was a threat in corporate offices where IBM was king.

What a difference a few years make. Personal computers are everyday work tools now, and workstations are out of the lab. Both can be linked in networks that do much of what a mainframe can—for 1/100 the cost. As a result, world sales growth for mainframes has dropped to 4% a year, one-third the rate in 1982. No longer the largest computer market, mainframes are third, behind PCs and minicomputers. Only one thing hasn't changed: Despite its efforts to diversify—into PCs, workstations, even phone equipment with the failed acquisition of Rolm Corp.—IBM relies as heavily as ever on its mainframe business. And because it does, it has become a laggard.

NEW STRATEGY. IBM's revenues have grown at an average 6.1% a year since 1985 vs. 9.2% for the overall computer industry. Despite a reorganization last year and extensive cost-cutting, the company will struggle this year to match 1984's record \$10.77 a share in profits—on about \$18 billion more in revenues. Its stock is trading at 11.9 times earnings, 4% below the average for the Standard & Poor's 500-stock index. Even John F. Akers, IBM's determined chairman and chief executive, expects his company to grow more slowly than the overall industry for two more years, perhaps—and that may be optimistic. "I don't see any scenario in which IBM can grow faster than the industry," says Rick Martin, an analyst at Prudential-



MAINFRAMES REMAIN IBM'S BREAD AND BUTTER

	Revenues	Gross profits*
	Estimates for 1989, millions of dollars	
Mainframe hardware, software, peripherals, and maintenance	\$28,262	\$18,083
Midrange hardware	4,891	3,004
Nonmainframe peripherals	3,900	2,379
Personal computers, terminals, workstations and typewriters	12,252	6,249
Nonmainframe software and maintenance	7,824	4,964
Other	6,950	2,102

*Profits before selling, general, and administrative expenses, research and development, and taxes

DATA: SANFORD C. BERNSTEIN & CO. ESTIMATES

the Securities Inc. "It's too dependent on mainframes."

But now, IBM is trying to turn its albatross back into an eagle. It has a new strategy that it hopes will rekindle the mainframe's growth and help sell small computers, too. IBM will continue to hedge its bets by investing in every other promising technology. But even if it eliminated the rapidly growing markets for workstations or computers used for image processing or desktop publishing, these businesses are so small that they reflect on IBM's \$60 billion in revenues could hardly show up. So in a way, IBM has no choice but to spend untold billions to save the mainframe.

The plan is to transform the 19-year-old System/370, which already is the central repository of data for most large U.S. companies and many world governments, into an entirely new computer. A remodeled 370 would store more data, including electronic images, voice messages, and even video.

But IBM wants to do "more than simply turn the crank," says Akers. It wants to make the mainframe into a hub that will anchor vast information networks in the 1990s. Digital Equipment Corp., most notably, is already headed in this direction, selling networks based on minicomputers. But the networks IBM plans would be much more powerful.

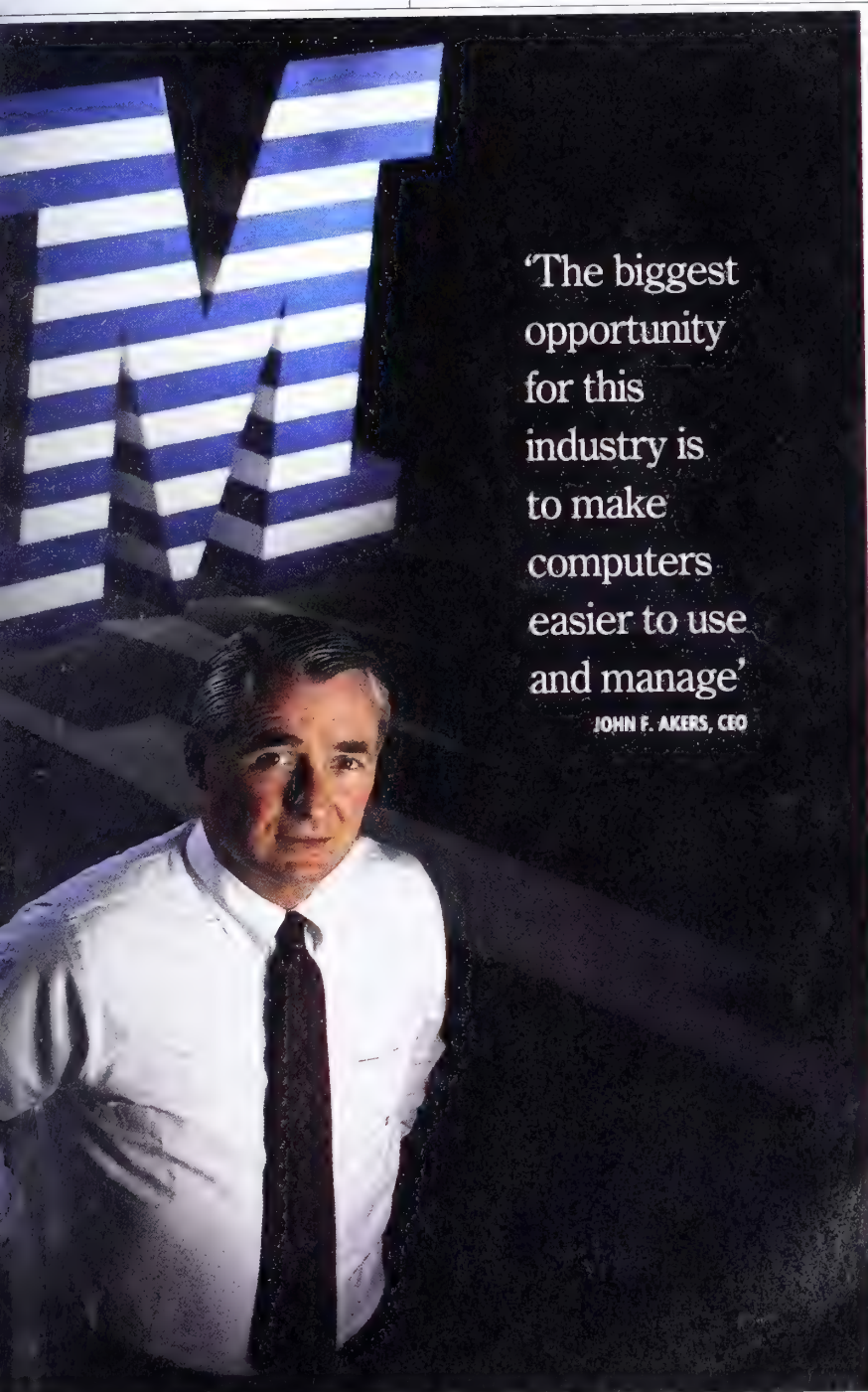
With its system, the command "Tell me last week's sales by product line" would produce numbers automatically calculated from data bases located around the world. Currently, such a request might mean querying 100 different business units and tabulating the answers.

In short, IBM is pushing mainframes as the solution to the No. 1 computer problem of corporations—managing an overwhelming surplus of data. Powerful PCs may be useful. But how is a company to make sense of the expanding pools of information collected by all of those, each independent of the rest? "The fundamental problem is getting the whole organization to use its data consistently," says J. Bruce Harreld, chief information officer at Kraft General Foods. IBM's answer: Make the mainframe lord of data bases. Connect it to all the smaller machines, and have it hand them any piece of information they demand, even if it's in another small machine half a globe away. Revamping the aging System/370, says Brian Jeffrey, managing director of International Technology Group in Los Altos, Calif., is "IBM's most significant project since the System/360 introduction in 1964."

CRUCIAL EDGE. IBM took a big step toward its goal on May 16, when it announced software to tie together its own mainframes, AS/400 minicomputers, and PS/2 personal computers for what it calls "cooperative processing." The programs, called OfficeVision, fit into a grand software scheme IBM calls Systems Application Architecture. SAA is an evolving set of strictly defined rules for the connections, or interfaces, between programs, data bases, and complete computer systems in the IBM product line. In theory, machines running software with SAA interfaces will more easily tap into the huge amounts of data stored in the 370.

SAA was conceived just for IBM customers. But now the company is encouraging all software makers to use it by giving them the specifications for the interfaces. "We would like to see SAA accepted as an official standard," says Earl F. Wheeler, head of IBM's Programming Systems Group. If this happens, IBM's mainframe sales should boom. SAA "will require more mainframe power and more storage," Wheeler adds. Beyond that, the company would begin to leverage its strength in large systems into sales of computers that would be attached to its mainframes. For instance, since it would know the most about SAA's future direction, IBM could be the first to market with SAA-compatible products.

That may be the catch, however. Indeed, the biggest threat to SAA and the new mainframe strategy may be that IBM has sole control of them. Over the



'The biggest
opportunity
for this
industry is
to make
computers
easier to use
and manage'

JOHN F. AKERS, CEO

past five years, customers increasingly have demanded that computer makers dispense with proprietary products—those that work only with one company's systems—and move toward open standards that let customers mix brands of machines. That forces suppliers to compete more on price and performance. SAA isn't completely proprietary, since it's being shared. But it still gives IBM a unique edge, and it can be construed as an effort to subvert the mounting open-systems movement to IBM's advantage. That may be enough to scare away buyers who don't want to depend on just one supplier.

Another problem for IBM is timing. It isn't the only company aiming to be the king of what it calls enterprise networks. DEC, Tandem Computers, and Unisys, among others, hope to beat IBM to the punch with less costly, more flexible solutions, albeit ones that aren't as sweeping as IBM's. Other computer makers, meanwhile, including Hewlett-Packard Co. and American Telephone & Telegraph Co., are hammering out nonproprietary software standards for managing large networks. And suppliers of data base



CONRADES: NOT JUST MACHINES—BUT "TOTAL SOLUTIONS"

software, such as Oracle Corp. and Relational Technology Inc., are tackling the problem of distributing data across many machines. The complete version of SAA may not be ready for years—after several competitive products are out. If it is too late to market, IBM's grand scheme could fall flat.

Even if IBM is first, there's the question of how wide a following it can build. James L. Cassell, a former IBM main-

frame marketing executive who now tracks large systems for consultant Gartner Group Inc. in Stamford, Conn., says the DEC's inroads and rapid advances in desktop machines have loosened IBM's hold on the 1,000 or so big corporate customers that he estimates account for more than half the profits.

FUTURE-MINDED. These customers are bound to IBM by tens of billions of dollars they have spent on its mainframes and the software to run them. But there's a heightened risk, says Cassell, that with open systems abound, that IBM's Blue customers might drift away from IBM for future purchases. The No. 1 goal of IBM's new strategy, Cassell says, is to "recapture control" of its

largest customers—partly by giving them a system so integrated it's hard to clone. "IBM really cares about that piece of the business," he says.

The implication is that many small buyers—who in any case might have been turned off by the steep price of SAA (below)—will remain up for grabs. "There's not much there for smaller customers," says Steve J. Lair, an analyst with Dataquest Inc.

THE SOFTWARE THAT TIES IT ALL TOGETHER

Executives at IBM call it the most important software the company has ever announced. To produce it, Chairman John F. Akers set to work 1,000 programmers in eight laboratories around the world. Two years and, by some estimates, \$500 million later, they have produced the OfficeVision series of applications software, which will be released in pieces over the next year. "We broke our collective backs to deliver," says Terry R. Lautenbach, general manager of IBM U.S.

The result will demonstrate the power of Systems Application Architecture, a scheme IBM devised in 1987. OfficeVision will use the IBM Personal System/2 PC as the window into information stored in IBM minicomputers and mainframes—the first time all three will work in concert. Until now, extracting information from large IBM systems usually was a job for programmers. But OfficeVision, which is based on the Presentation Manager graphics program that was developed

by IBM and Microsoft Corp., emulates the user-friendliness of Apple Computer Inc.'s Macintosh. "The quality is superior to anything IBM has had," says John C. McCarthy of Forrester Research Inc. in Cambridge, Mass.

'AHA' Initially, OfficeVision will focus on routine office tasks. It includes electronic mail, an address book, a phone list, and the like, all manipulated by means of a mouse pointer. A dozen mainframe software makers already are developing insurance, financial, manufacturing, and human-resource packages for OfficeVision. And Lotus Development Corp. and Microsoft say that they intend to adapt their spreadsheet programs for it as well. IBM will even make it possible to give existing mainframe software the look of OfficeVision by using a program called Easel that runs on a PS/2.

OfficeVision requires a new IBM proprietary version of OS/2, the PC operating system, or basic software, introduced two years ago. Still, it could



IBM'S WHEELER: OFFICEVISION WILL ALLOW

IBM'S ROAD MAP TO THE FUTURE

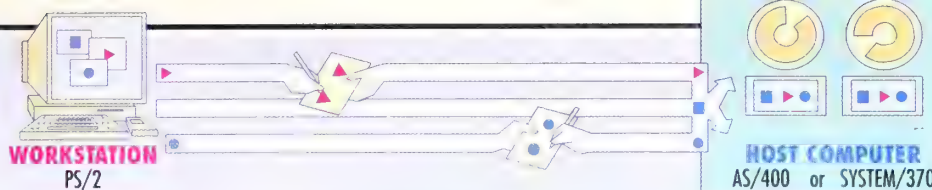
IBM's Systems Application Architecture (SAA) describes how various elements of IBM computers should connect to each other. IBM says that if customers write their programs according to SAA's rules, they'll find it easier to build efficient networks. SAA may also help IBM change its hardware without affecting those programs.

 The "graphical user interface" defines how programs interact with human operators. This includes the keyboard and the "look and feel" of display screens.

The "communications interface" passes information from a PC to related programs in a remote host computer. The goal is to get small and large computers to cooperate better.

In the host computer, the SAA communications interface directs data from the PC into an applications program, such as a financial accounting system—and back out again. Before SAA, each host program handled its communications uniquely, which made it hard to connect PCs to large computers. Now, the connections will be standardized, making it easier to write new host programs.

 SAA also defines how the host's applications programs should request information from a large, cross-indexed data base. For instance, data on yesterday's automobile orders might be retrieved by a factory scheduling program, which would notify a factory workstation about work to be done. Currently, host programs store their data uniquely, making it difficult for them to share information.



DATA: BW

Although not publicly, IBM has been pulling over a more versatile, network-oriented mainframe for years—at least since the early 1970s. That's when it quietly began work on a computer called the Enterprise System. The idea was to replace the System/370, which was merely an expanded version of the earlier System/360 and was severely limited in handling the kinds of terminal-based, transaction-type applications customers were beginning to plan. These ranged from airline reservation systems to banking terminal networks, where many employees need access to a central store of constantly updated information.

FS was supposed to be much more powerful and more functional in those kinds of jobs yet much easier to program and operate. It would handle huge data bases but shield customers from their incredible complexities: Many tedious housekeeping tasks normally handled by programmers would be eliminated in the system's completely redesigned, radically new architecture.

FS never saw the light of day, though. In 1975, after spending \$3 billion or more, insiders say, the company dropped the project without even acknowledging its existence. The main reason: IBM was afraid that customers wouldn't go for

the machine if it meant they would have to rewrite their 370 software. That's the problem SAA aims to avoid by creating smooth connections between old 370 software and a modified mainframe.

So IBM stuck with the System/370, gradually extending its capabilities every few years, even though by 1974 it was, by IBM's own admission, outdated. It was hard to argue with the results. From 1975 to 1985, world mainframe sales and IBM's revenues more than tripled. Ironically, the 370's inherent inefficiencies—it was designed essentially to handle batches of punch cards—may have forced customers to buy more ma-



COMPUTERS, AND MAINFRAMES TO WORK TOGETHER FOR THE FIRST TIME

boost sales of Microsoft's standard OS/2 beyond the 90,000 sold to date. Applications for OS/2 can be "snapped into" OfficeVision, IBM says. This will end the dearth of such programs, analysts say, and thus make all versions of OS/2 more popular. With OfficeVision, "you may finally get the 'Aha!' of why OS/2 is important," says IBM Senior Vice-President George H. Conrades.

Those "Ahas!" could be a while in coming, however. Most of the key parts of OfficeVision—such as connections into the mainframe—won't be fully ready for a year. What's more, OfficeVision may appeal most to big companies: IBM says it will cost at least \$7,300 per workstation. That doesn't include the cost of a PS/2 with enough internal memory—eight megabytes, or four times what IBM's most powerful PC comes with—to run the huge OfficeVision programs. That machine could cost an additional \$11,000.

Still, IBM is betting that a lot of customers won't mind. "Instead of sitting down to a computer the way I look forward to the dentist," says Earl F. Wheeler, the IBM vice-president in charge of SAA, "they'll enjoy using it—and be more productive."

By Deidre A. Depke in New York

ON THE STREET, BIG BLUE IS BIG BLAH

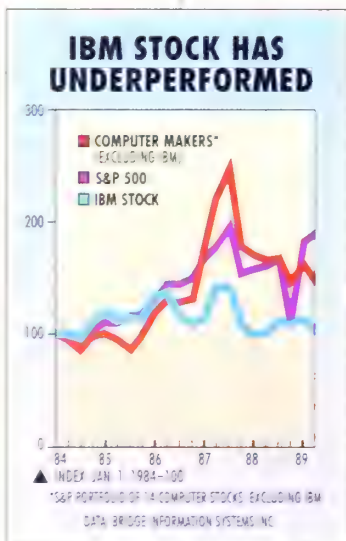
On Wall Street and Main Street, IBM is known as Big Blue—and for years, it has been the quintessential blue-chip stock. With the largest market capitalization of any corporation, \$65 billion—3% of the Standard & Poor's 500-stock index—IBM influences the market more than any other company. But the giant computer maker rose to its position of preeminence in the days of vibrant growth that ended in the early 1980s. Since 1984, Big Blue has been persistently lagging behind the stock market, and this year, its performance has been awful—causing rumblings of discontent from the vast army of analysts who follow the company.

Although the overall market has risen to its highest levels since October, 1987, IBM shares have dipped 8.5% since New Year's Eve, to 111½ on May 17—about the same price IBM common stock was fetching as far back as May, 1983. IBM's recent troubles stem from the March announcement that first-quarter earnings would be hurt by delivery delays of some of its large 3090 systems. But in the view of some observers, the problems lie much deeper. "It's been four years of disappointments," laments Daniel Mandresh, who follows IBM for Merrill Lynch & Co.

Mandresh and other analysts contend that IBM's management has tended to raise the hopes of investors through optimistic pronouncements—expectations that later have been dashed. And even analysts who are recommending purchase of the stock maintain that the company has been slow to respond to the competitive challenges. It has resisted mass layoffs, for example.

'THROWING MONEY.' Although IBM has transferred thousands of employees from other jobs into sales, critics on the Street maintain that IBM's cost structure has become bloated as a result and that its domestic sales force has not been efficiently deployed. "IBM

has taken the approach of pouring money into marketing," says Don Young, a computer analyst at Sanford C. Bernstein & Co. "They don't know what to do, so they're throwing money at the problem." Young maintains that IBM's earnings are penalized by \$4 a share because of excessive selling, general, and administrative costs. On average, analysts expect 1989 earnings to reach \$10.70 a share.



Whatever their view of IBM's managerial acumen, professional investors generally believe that the company's growth days are pretty much over. The era of spectacular share-price advances was last seen during the bull market for high-tech issues in 1982 and 1983. Then IBM and other mainframe manufacturers began to feel the sting of smaller rivals. Some analysts now classify IBM as a cyclical stock—like steel companies and other industrial stocks that move in tandem with economic swings.

But even though IBM's share price has fallen, there are far cheaper stocks in the cyclical category—autos, for example. Ford Motor Co. is selling at a price-earnings ratio of four times trailing earnings, vs. 11.9 for IBM, and the auto maker's yield is 6%, vs. 4% for IBM, which recently raised its dividend. A 4% yield won't attract income-oriented investors when significantly higher yields are available.

If IBM is not a growth stock, not an income stock, and not a true cyclical stock, then what is it? Well, more than anything else, it is an institutional stock. Nearly half of its shares are owned by pension funds and other institutions that are attracted by one of IBM's enduring assets: It is owned by institutions. There has been no major institutional movement away from Big Blue despite the recent malaise. And as long as these investors remain steadfast, IBM stock will never truly suffer.

By Gary Weiss in New York

chines than they would have needed with an updated computer.

All the while, FS's spirit lived on within IBM. Its basic architecture showed in the System/38 minicomputer in 1984, recently replaced by the AS/400. More important, veterans of the FS project moved into top executive slots, including Vice-Chairman and Chief Technology Officer Jack D. Kuehler. They are slowly molding the System/370 into the shape of an updated FS. And by now, even Chairman Akers is talking like an old FS hand.

When William C. Lowe quit early this year as head of the Entry-Level Systems business, responsible for personal computers, Akers replaced him with the former president of the mainframe division, James A. Cannavino. "It is very useful as we try to...combine intelligent workstations and large computers to have a guy with his background in large computers working from the other end," says Akers. He adds: "The biggest opportunity for this industry is to make computers easier to use and manage."

'BABY STEPS.' That task falls to Carl Conti, a former FSer who now runs mainframe development. His goal: multiply many times over the 370's ability to handle huge amounts of data, then must if it is to run big networks. Last year, IBM greatly increased the machine's main memory. As early as next year, the rate at which information and programs flow into that memory will be quadrupled when optical fiber cables are added to connect disk drives and other storage devices. IBM also plans much faster, higher-capacity disk drives and connections to make several mainframe share immense banks of disk and tape drives instead of one set per machine. Meanwhile, the now laborious task of tracking data files and making backup copies is being automated to increase productivity in large data centers.

By 1991, when a new family of processors called Summit is due, the System/370 will have enough oomph to execute close to 400 million instructions per second (MIPS), nearly four times what's possible now. IBM will further boost operating power by switching to super-cool gallium arsenide microchips—sometimes in the mid-1990s, analysts think. The company also is backing Supercomputer Systems Inc., headed by former Cray Research Inc. designer Steve Chen. His scientific processor, slated for production in the early 1990s, would give the System/370 scientific number-crunching power 100 times better than today's best supercomputer, IBM claims.

Each of these changes is making the System/370 look more like what FS was supposed to be, says Pru-Bache's Martin, a former IBMer. But this time, ad-

sell, IBM is reengineering the mainframe in "baby steps," not all at once. That will ease the transition for customers. It may also be unavoidable. "There's a vast amount of software to be written that even IBM can't do it in one swoop," he says.

The ultimate aim, says Conti, is a mainframe that can process thousands of queries a second from all kinds of computers: IBM, DEC, Apple Computer, and even Sun Microsystems workstations. That should keep IBM's mainframes at the center of its best customers' expanding networks no matter what kind of smaller computer they buy. And that would help drive the demand for mainframe equipment, with its 65% tax margins. The synergies of connecting desktop and midrange comput-

ers to the mainframe, says Martin C. Clague, Conti's assistant general manager for marketing, will soon cause an inflection point in mainframe sales. That's the talk for turning from a slowing growth curve to one that's re-accelerating.

ALRY. But how soon? And how much? Those are the \$64 questions. Gartner's Cassell says demand for mainframe power and storage capacity has been growing annually at 30% to 35% in recent years. It has been satisfied largely by upgrading existing machines. But by 1992, he estimates, growth could increase to 40% to 45%, if users begin connecting their other computers to mainframes. That should ease IBM's annual growth in mainframe revenues from a projected 8% this year to 10% to 13% a year, Cassell reckons. Says Prudence's Martin, using a popular measure of computer performance: "If cooperative processing works, [use of] mainframe MIPS should go through the roof."

Independent software companies might then give a growing share of their attention to IBM computers—and less to its rivals. That includes DEC plus two groups of companies, one led by AT&T and the other by IBM, that are trying to establish a set of open software interfaces centered on Unix, an operating system that has been adapted to virtually all brands of computers. At least, that's what IBM anticipates.

Still, a lot could go wrong. There's the matter of delivering all the new software. IBM's first round of SAA programs,

just introduced, will contain some 5 million lines of new code, the company says. The 370's 15 million-plus lines of core programming also must be updated. And Wheeler's staff must keep a tight rein on IBM's dozens of software groups to ensure that they adhere strictly to the spirit and letter of SAA.

Beyond that, there's more to conquering the network market than coming up with a bigger idea. DEC, having missed out on the seven-year-old PC boom, has developed software to connect those small machines to its networks. And DEC has been beefing up its VAX minicomputers' power to handle the kinds of database transactions such networks require. DEC even boasts that it's way ahead of SAA on one score: Its networking software already interacts equally

which traditionally ran on IBM 370s.

Instead of keeping pace in desktop computers, moreover, IBM has fallen behind. Although it has sold more than 3 million PS/2 personal computers, its PC market share is at a six-year low of 12.5%, the result of competition from the likes of Compaq Computer Corp. and Apple. Meanwhile, IBM's workstation, the three-year-old RT-PC, has been a highly visible failure, though an improved version is due out in the fall.

Those are the types of problems that were supposed to be solved by IBM's 1988 reorganization of its U.S. operations. Akers trimmed corporate staff, thinned middle management, and made U.S. marketing and product development report to a single executive, Terry Lautenbach—all to make the lumbering

giant more nimble in fast-changing markets. Akers says decisions are now being made lower in the organization and therefore faster than before. He adds: "Some of the fruits have been picked, but I feel we have much more to do in quickening the pace" of developing new products. Wall Street thinks he also should do more to cut costs. In the U.S., IBM's sales expenses have risen 60% in the past three years, even as slow demand has caused its revenues to decline by 20%.

PACKAGES. Partly, the higher costs reflect the huge holding action IBM has mounted until its new mainframe strategy kicks in. For instance, much of IBM's domestic cost problem stems from what U.S. marketing chief George H. Conrades calls the company's campaign to win the "hearts, minds, and budgets" of customers.

That started two years ago, with a redeployment of thousands of people from staff jobs to the field, where they aren't yet fully productive. Once just a seller of machines, Conrades says, IBM now wants to sell "total solutions." These range from PC packages, bundled with software for specific jobs, to corporate "systems integration" contracts comprising everything from planning and designing an entire network, to building, maintaining, and even running it. The change in attitude shows up in the new compensation structure for IBM salespeople. In the past, commissions were calculated according to an arbitrary points system that mainly encouraged hardware sales. Now, commissions



CANNAVINO: A MAINFRAME MAN TAKES CHARGE OF THE PC DIVISION

well with IBM PCs and DEC's own VAX workstations, Apple's Macintoshes, and the bulk of Unix-based computers.

While customers wait for SAA, moreover, PCs will make further inroads into mainframe territory. A new \$10,000 DEC workstation, for instance, offers the same number-crunching power as mainframes that cost 50 times more. And for many purposes, the DEC machine is much easier to program. Such price and operating differentials are beginning to relegate mainframes by and large to the area of big, central applications. Lockheed Corp., for instance, recently came out with a workstation version of its CADAM mechanical design program,

WHY IBM IS CRAMPING ITS BIGGEST CUSTOMERS' STYLE

They are IBM's biggest customers, accounting for \$16 billion in purchases of its mainframe gear last year. They are the 300 or so independent U.S. computer leasing companies, and they have a problem: As IBM launches its aggressive mainframe strategy, many may get squashed.

Big buyers or not, the leasing companies are costing IBM money. The No. 1 computer maker likes its other customers to trade up, and thus nearly every year it brings out new mainframe processors. The problem is that customers don't always need the extra power. So they often turn to a leasing company, where they can buy an older IBM processor for as little as 10% of what IBM charges for its latest machine.

REBUILDING. That's not all. The leasing companies know how to take apart IBM's mainframes and rebuild them as new ones. Some large IBM models use up to six processors. Packaged together, they're cheaper than if bought individually from IBM. So, the lessors can buy a four-processor model, split it into a pair of two-processor models, and make a buck on the resale. "There's a built-in price disparity," says Kenneth N. Pontikes, chairman of Comdisco Inc., the largest independent computer lessor.

IBM is responding by trying to make it expensive for outsiders to get the special software, called microcode, that's needed to breathe life into a rebuilt mainframe. IBM used to charge only once for the microcode, and the lessor could copy it as often as needed. But it now insists that its copyright permits it to charge for each copy. IBM has set its license fees so high, leasing companies complain, that their profits have been wiped out on certain machines. This was the subject of an anti-

trust suit filed against IBM in 1985 by Allen-Myland Inc. in Broomall, Pa., which reconfigures IBM computers. IBM won that case last year.

Now, in Federal District Court in New York, AMI is seeking relief on grounds that microcode pricing violates the consent decree that IBM signed in 1956 to settle a U.S. government antitrust suit. That agreement, still in effect, calls for IBM to provide spare parts for its data processing machines on a nondiscriminatory basis. IBM's defense: Microcode isn't really a spare

part and therefore not covered by the decree. It has filed motions calling for Judge David N. Edelstein, who presided over a U.S. vs. IBM antitrust case in the 1970s, to be removed from the latest case. The company says he's anti-IBM.

Much is riding on the microcode issue, especially as IBM re-engineers its System/370 mainframes. Market watchers such as Brian Jeffrey of International Technology Group in Los Altos, Calif., expect IBM computers to use more and more microcode. That's one way to make them more powerful—and to control the value of hardware that IBM already has sold.

Not every leasing company is panicking.

Says Richard Kazan, chairman of Capital Associates Inc. of Colorado Springs, Colo.: "IBM's just a convenient whipping boy. IBM did what IBM should do." A weightlifter by avocation, Kazan thinks he can hold his own against Big Blue. Besides, he and Pontikes, among others, are diversifying into non-IBM equipment. They can get you a VAX from Digital Equipment Corp. or a workstation from Sun Microsystems Inc. So far, those companies aren't playing the microcode game.

By John W. Verity in New York, with Lois Therrien in Chicago



are set according to total sales, whether of hardware, software, or services. Conrades credits the new plan with putting "emphasis on the customers and a premium on value-added selling."

To help stimulate its customers' imaginations and purchases, IBM also has set up a \$100 million "market development fund" that this year, Conrades says, will identify some 15,000 new ways to use computers. At New York City's Human Resources Administration, for instance, an IBM team has just spent six weeks dissecting and analyzing office operations in excruciating detail. The outcome: no immediate sales, but lots of goodwill and market intelligence that will be useful there and in other cities. Says Kraft General Foods' Harreld: "In the past, IBM told people what to do and how to do it. Now, they come in and say, 'Tell us how we can help you.' It's a much calmer, relaxed style."

TESTIMONIES. To back up the big marketing push, IBM also has signed up legions of small software and hardware companies to fill gaps in its product line. And it treats them more kindly. In the past, for instance, IBM might let such companies sell its machines with their customized software, but it would compete against them for the same customers. Now, IBM has stopped that and instead assists such companies. Financial software supplier Walker Interactive Systems in San Francisco proposed a joint series of seminars across the country this spring, and in less than an hour, IBM agreed to participate. It even kicked in money for the road tour and is paying Walker a commission on sales of any extra mainframe gear that its software may stimulate, says David G. Fisher, Walker's vice-president for marketing.

IBM will need every one of these allies as it executes its new mainframe strategy. They are key players in the holding action. And by their frequent testimonies on how much IBM has changed for the better in recent years, they also tend to prove IBM's assertion—crucial if it is to sell the idea of mainframe-based networks—that it knows what the customers want and can deliver.

Once this message sinks in, maybe IBM will stop hearing the old joke about the three women who are discussing their husbands over a cup of coffee. One describes her man as just perfect—a professional wrestler who's not afraid to play rough. The second says her husband is a poet—gentle and sensitive in all the right ways. But the third woman is just plain frustrated: "My husband is an IBM salesman," she says, "and all he ever does is sit at the end of the bed and tell me how great it's going to be."

By John W. Verity in New York

Turning millions of pounds of ingredients
into hundreds of bakery products
was a baker's worst nightmare
until somebody said,
"Let's reach a little higher."



A portrait of Daniel Shulgin, a man with short brown hair, smiling. He is wearing a dark suit jacket, a light-colored shirt, and a red tie.

Daniel Shulgin

Vice President, Operations
Roush Products Company, Inc.

A portrait of V.J. "Vinnie" Noce, a man with short brown hair, smiling. He is wearing a dark suit jacket, a light-colored shirt, and a red tie.

V.J. "Vinnie" Noce

Chairman and Chief Executive
Roush Products Company, Inc.

In commercial baking, as in many businesses, precision control is the recipe for success. So when The Roush Products Company needed to prepare tons of premix for hundreds of bakeries 24 hours a day, they added an additional ingredient—Allen-Bradley, the industrial automation people of Rockwell. Here's the story from the people who made it happen.





Frank Hurtt
Manager,
Pedar Rapids Branch
Allen-Bradley Company, Inc.
Rockwell International

Catherine E. Rotzler
Systems Engineer
Integrated Controls
& Computer Systems, Inc.

Noce: Baking is an art, not a science. But the complexities of commercial baking are enormous. We mill and blend thousands of tons of premix annually. Our problem was a big one — how to get cost effectiveness over massive volume, stay competitive in the market, and still turn out a wide variety of quality consistent products needed by our customers around the world.

Shulgin: It used to be done by a guy with a recipe card saying, "Let's see, did I remember to put this or that in, or not?"

Noce: We knew our future growth depended on technology that first, the common individual could understand; second, that wouldn't require a great deal of input on his part and finally, that could accommodate all the changes we have to make on a daily basis.

Hurtt: We came into the plant four or five times to discuss their automated batch recipe needs before we made our initial proposal. At one point Dan said to me, "We don't care if the technology comes from a science fiction movie, if

it's the newest and best on the market, that's what we want."

Shulgin: We needed to bring together control and information so we knew we wanted the Allen-Bradley Advisor System. And we wanted it now, right away. Start up time is usually two to three weeks. We tried to do it in a weekend.

Hurtt: The key word is "tried."

Shulgin: That's right, it didn't work. But it only took an extra couple of days because Allen-Bradley and its local distributor practically lived here the whole time, helping us get on line. And after we got rolling, ICCS, the systems integrator, came in to help with the programming. Now when we need a part or service, we just pick up the phone.

Rotzler: Initially we were brought in to solve one particular problem. That was 2½ years ago.

Hurtt: Since then, a real working relationship has grown up between Allen-Bradley, ICCS and the people here at Roush Products Company.

Shulgin: Since that first automated

batch processing system, we've added a second that's just about identical and we're looking at a third and fourth in the near future.

Noce: Well, you don't grow like we have if you can't take advantage of the right technology, and that means working with the right people. Everybody, and I mean everybody, who comes into this plant leaves saying, "My goodness, you fellows are ten to fifteen years ahead of most everybody else." I'm delighted with our relationship with Allen-Bradley and ICCS.

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CONGRESS

JIM WRIGHT ISN'T THE ONLY POL WITH A SUGAR DADDY

The Speaker's travails have lawmakers fretting over their own ties to wealthy patrons

Call it the Wright Legacy. Whether or not House Speaker Jim Wright (D-Tex.) survives the furor over his financial affairs—and the betting is he won't—he will leave behind a vastly changed political landscape. For years, many on Capitol Hill have benefited from the same financial buddy system that gave rise to the relationship between Wright and Fort Worth developer George Mallick. Now that the Wright affair has put the spotlight on such dealings, many legislators fear that their friendships with wealthy patrons will come back to haunt them in their next campaigns.

Ties between powerful members and their financial benefactors are especially worrisome to House Democrats right now. Wright's heir apparent, Majority Leader Thomas S. Foley (D-Wash.), has a long-standing relationship with a Boston money manager. No one has raised questions about Foley's investments, which seem to comply with both the letter and the spirit of the law.

But the finances of the No. 3 Democratic leader, House Majority Whip Tony Coelho (D-Calif.), are proving to be embarrassing. Coelho's troubles started when a California friend, savings and loan executive Thomas Spiegel, steered him into a \$100,000 junk-bond investment—and lent him half the purchase price.

'INCREDIBLY NASTY.' In their own ways, Wright, Foley, and Coelho have all been the beneficiaries of a buddy system that takes many forms. Typically, a well-heeled patron manages the portfolio of

his political chum. That can lead to special investment opportunities not available to ordinary Americans and to favors, such as attractive loans. It's not unusual for members and benefactors to put each other's relatives on the payroll. Lawmakers and their patrons swear that relationships are based solely on friendship. But to skeptical voters, it looks like if money is buying access and influence.

That's why so many lawmakers dread May 22, the day their 1988 reports listing sources of outside income will

be made public. Already, researchers for both the Republican and Democratic campaign committees are lining up for what they're sure will be a fresh supply of dirt. "The next congressional election is going to be incredibly nasty," predicts Norman J. Ornstein of the American Enterprise Institute. Says Representative Tommy F. Robinson (D-Ark.): "A lot of congressmen are very nervous."

Robinson says he's "dotting all the i's and crossing the t's" as he prepares his disclosure



HOUSE LEADERS COELHO AND FOLEY BOTH HAVE BENEFACTORS, BUT ONLY COELHO'S LINK HAS PROVED EMBARRASSING

atement. Small wonder: In the wake of the Wright-Mallick affair, Robinson's financial dealings with Arkansas oilman Jerry Jones, the new owner of the Dallas Cowboys, have become big news in Little Rock.

Jones and Robinson grew up together in "Dog Town," the wrong side of the tracks in Little Rock. They are like brothers. "Loyalty means something to me," says Robinson. "I'd defend him to the end of the world, and he'd do the same for me." When Robinson was briefly without a job between his 1984 election to Congress and his move to Washington, Jones paid his friend \$7,500 to manage an Arkansas hunting club.

MONEY TALKS. Jones and his family members have given Robinson some \$4,000 in campaign contributions in his three races for Congress. And House records show Jones has lent his friend between \$100,000 and \$250,000, which Robinson says he is paying back in installments. The two are partners in a 700-acre farm that grows rice, soybeans, and wheat in Monroe County, Ark.

The connection does not end there. Robinson has employed two of Jones's children. And Robinson recently named his benefactor's 17-year-old daughter, Charlotte, as his top aide, at a salary of \$10,000 a year. Charlotte Jones, who majored in biology at Stanford University, says she is well-suited for the job because of the candid and trusting relationship she has with Robinson. Is her boss troubled by the appearance of favoritism? Not really. "If I don't do what she says," jokes Robinson, "maybe she'll sue me."

The bond between Robinson and Jerry Jones is typical of arrangements that have been a fact of Washington life for as long as there has been a Congress. Unlike a lobbyist or a campaign contributor, the political angel usually has a personal rather than a business link to a politician. He shows his pal isn't earning nearly as much as he could in the private

sector, and he knows ways to remedy that. Although it's impossible to say precisely how many such arrangements exist throughout the government, they are "quite common," says Amitai Etzioni, the director of the Center for Policy Research at George Washington University. "You don't have to look any farther than Ronald Reagan," whose tight circle of California millionaires helped to make him financially independent.

In Congress, not everyone enjoys outside help. Some have independent means, and some never get offers. The few members who refuse on principle to get involved with would-be benefactors are regarded by their colleagues as mavericks. One was Senator William Proxmire (D-Wis.), a good-government purist who was notorious prior to his retirement for eschewing campaign contributions from special interests and avoiding any deals that even hinted of a conflict.

But Proxmire was the exception. The escalating cost of modern politics drives most members into a frenzied search for outside income. A favorite form is speaking fees collected from interest groups. Many members find it hard to live on an \$89,500 salary, plus the maximum allowable honorarium of \$27,000 a year for House members and \$36,000 for senators. And most House members are too obscure to earn anything more than pocket money from honoraria.

A pal who offers to help make ends meet can be hard to refuse. Says one former congressman: "You just sort of drift into it. If you need some help and you let your friends know, you get help. There wouldn't be any quid pro quo."

Spiegel, the head of Columbia Savings & Loan Assn. in Beverly Hills, Calif., insists there was nothing wrong with his dealings with House Majority Whip Coelho. The congressman received a \$50,000 loan from Columbia to buy junk

bonds but failed to list the loan on his 1986 financial disclosure report. "There is nothing inappropriate about the transaction between Congressman Coelho and me," Spiegel says. Coelho told *The Washington Post* that he didn't list the loan because of an oversight by his accountant. He did not respond to inquiries from BUSINESS WEEK.

Majority Leader Foley enjoys a reputation as a paragon of virtue in the House. Yet he, too, has benefited from the buddy system, even in its most innocent form. He has a close financial relationship with Peter de Roeth, a principal in Boston-based Account Management Corp. Foley, the son of a judge, and de Roeth, the son of a doctor, were chums in a comfortable Spokane (Wash.) neighborhood. They spent after-school hours listening to classical music and reading the orations of famous British parliamentarians. "We were the best of friends," says de Roeth.

After high school, they went their separate ways—Foley to the University of Washing-



ARKANSAS' ROBINSON AND OILMAN JONES HAVE TRADED FAVORS FOR YEARS



INVESTOR SHANNON MADE MONEY FOR WAYS & MEANS CHAIRMAN ROSTENKOWSKI



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ton, to law school, and into politics; de Roethth to Princeton University, to law school, and into finance. Some 20 years ago, Foley, then a junior House member, asked his friend to handle his investments.

SPECIAL TREATMENT. Since 1968, de Roethth has parlayed Foley's initial stake of \$2,000 into a nest egg of almost \$60,000, largely through well-timed trades in newly issued stock. De Roethth normally charges clients 1% of assets each year but says that he charges Foley a "nominal" fee, which he declines to specify. More important, de Roethth provides his friend with sophisticated financial management that small investors normally couldn't get.

De Roethth's efforts have provided the majority leader with some quick profits. For example, in January, 1987, Foley bought 200 shares in the initial public offering of Home Shopping Network Inc. for \$8,346. Less than two weeks later, de Roethth sold the shares for \$14,531. Not all of de Roethth's trades turn out well: In 1987, Foley lost \$11,253 on Carnival Cruise Lines Inc. But for all of 1987, he made \$11,000 on some 40 transactions handled by de Roethth. "Peter and I are old friends," says Foley.

"He has helped me with his counsel and advice. I'm deeply appreciative."

What's in it for de Roethth beyond friendship? The money manager can tell clients that the majority leader is his close friend. His son has worked as an intern in Foley's office. But de Roethth, who describes himself as a conservative Republican, says he expects no favors. "Our relationship is so benign as to be

The escalating cost of modern politics drives most members into a frenzied search for outside income

ineffective," he says. "I just think a guy like Foley deserves to be supported."

But even innocent arrangements can become dangerous if the lawmaker begins sponsoring legislation that helps his benefactor. Take the case of House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) and money manager Daniel J. Shannon. The president of Penmark Investments Inc.,

Shannon is the quintessential Chicago insider. His father, Peter, was the late Mayor Richard J. Daley's accountant and confidant. The younger Shannon mingled with the city's powerful politicians and befriended Rostenkowski.

The pair made several investments together. In 1980, just before he became Ways & Means chairman, Rostenkowski asked Shannon to manage his blind trust. Shannon also steered \$250,000 of Rostenkowski's campaign war chest into high-yield industrial development bonds. Those bonds have returned more than \$100,000 in tax-free interest since then—money that Rostenkowski can convert to his personal use when he retires.

Three years ago, Shannon and Rostenkowski severed their business relationship under fire. The cause was a spate of news stories about President George H. W. Bush's Tower, a residential high-rise in Chicago's Loop. Shannon was general partner in the project, and Rostenkowski helped win approval of a provision that gave the project a tax break. When the matter was raised in Congress, Shannon stepped aside. Rostenkowski declined to comment on the episode. Shannon says: "People felt that maybe my independence wasn't sufficient enough. I didn't want adve-



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d Senator William
mstrong (R-Colo.), a
se friend, both got
aised in a controversy
ee years ago. Arm-
ong, a member of the

ance Committee, added language to
1986 Tax Reform Act to benefit Gay-
d and a small group of fellow inves-
s in a coal-mining venture. At the
e, Armstrong was receiving more
n \$100,000 a year in payments from
ublisher's purchase of the now-defunct
Colorado Springs Sun from the
mstrong family. The provision was re-
ealed after a furor in Colorado. Arm-

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strong told the *Rocky Mountain News*
he did not stand to gain personally from
the tax break. Neither Gaylord nor Arm-
strong would discuss the episode with
BUSINESS WEEK.

GRAIN GAIN. Another benefactor relation-
ship that has attracted controversy is
one between Senate Minority Leader
Bob Dole (R-Kan.) and Dwayne O. An-
dreas, chairman of Archer Daniels Mid-

land Co., the giant
grain processor. Since
1972, Dole has received
more than \$60,000 in
contributions from An-
dreas, members of his
family, and ADM. He in-
vited Andreas on a con-
gressional trip to Mos-
cow. The senator's wife,
Labor Secretary Eliza-
beth H. Dole, then a
White House aide, pur-
chased an apartment in
posh Bal Harbour, Fla.,
from the Sea View Ho-
tel. Andreas is chair-
man of the hotel's
board of directors and
has a major financial in-
terest in it. A *New*
York Times investiga-
tion in 1987 concluded

that the \$150,000 purchase price was be-
low the market rate, although a spokes-
man for the Doles strongly disputes this.

Senator Dole has also come under at-
tack for his promotion of tax breaks for
gasohol. Kansas' role as a leading grain
producer gives Dole a natural interest in
gasohol, but ADM is by far the nation's
largest maker of fuel alcohol. Dole
scoffs at any suggestion of favorit-



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ism. "Bob Dole doesn't have benefactors," says Walt Riker, his press secretary. Asked a few years back about his relations with the Doles, Andreas said: "I've never talked [to Dole] about any political matter. Why would I? He doesn't need me. He's a friend. You're allowed to have friends in this business without doing anything wrong."

WRIGHT'S WRONGS. That's precisely the defense that Jim Wright will use when he goes before the House Ethics Committee on charges that he and his wife, Betty, accepted an undisclosed \$145,000 from Mallick in the form of a car, housing, and a job for her. The committee says Mallick had an interest in legislation because he owed money to a troubled savings and loan while Wright was involved in seeking a legislative solution to the S&L crisis. The Wrights say that the supposed gifts were legitimate business arrangements with an old friend.

"There's something very wrong here," Mallick told *BUSINESS WEEK*. "This isn't some Washington relationship. Isn't there any value in a personal friendship? Does it have to be self-interest? The way [committee Special Counsel Richard A.] Phelan is interpreting the rules, nobody in Congress can have friends, nobody can invest money, and a wife must be extremely careful where she works."

Michael Josephson, head of the Josephson Institute for the Advancement of Ethics, a nonprofit research organization in Marina del Rey, Calif., says that legislators will have to live up to ever-tougher standards after Wright. "You have to ask, 'Should politicians really have fairy godfathers?' Let's face it. If not for their power, they wouldn't."

The Wright affair has led both the House and Senate to establish task forces to reexamine ethics rules, which everyone agrees leave vast gray areas about what is and what is not permissible. More complete disclosure and tighter limits on outside income are likely to receive close attention. But in the end, no set of rules can cover every possibility. The ultimate test is what voters think of their public servants. "A proper benefactor relationship will survive critical examination," says Josephson. "The Mallick-Wright relationship doesn't. My advice is to always look at it as a cynical outsider. There are some deals that may be legal but just look bad."

Perhaps House Speaker Sam Rayburn put it best 50 years ago: "The ethics of a member of Congress should be judged not by his peers [but] by the voters at election time." That's precisely why so many of Jim Wright's colleagues are looking over their shoulders right now.

By Douglas Harbrecht, with Paula Dwyer and Richard Fly in Washington, Brian Bremner in Chicago, and Ronald Grover in Los Angeles

Economics

SAVINGS

HAVE YOU HUGGED YOUR BANKBOOK TODAY?

A higher savings rate is key to curing America's fiscal woes

Once, thrift was a solid American virtue. People spent frugally, built up their nest eggs, and planned for tomorrow. But in the 1980s, thrift became almost quaint, practiced only intermittently by the citizenry and not at all by the government. Last year, net public and private savings accounted for less than 3% of gross national product, down from around 8% in the 1950s and 1960s. The recent jump in the personal-savings rate will push national savings above 3% of GNP this year. But the American people will have to start stashing a lot more cash to restore the overall savings rate to the level that prevailed 25 years ago.

Most economists argue that national savings must rise—and rise substantially. For the past couple of years, the constant refrain has been that America is living beyond its means. Mounting foreign debt and a yawning trade gap were just the most immediate symptoms of this profligacy. Now, the longer-run effects are beginning to make themselves felt: Investment is slipping, living standards are eroding, and, for the foreigners who have made up part of our savings shortfall by investing here, returns are rising. While a few economists are untroubled by these consequences of undersaving, most are worried. "Saving is the wellspring of future economic growth," says James Poterba, a Massachusetts Institute of Technology economist. "There's a strong positive correlation between savings and growth."

ECONOMIC PRECEPT. That's because the economics texts teach that without saving there can't be investment. And without investment in technology, research and development, and the like, there can't be productivity gains and growth. In an open world economy, it's true that if some save more than others, capital may flow across borders for investment. But the inflow of Japanese and other foreign capital in recent years has not fully made up for the shortfall in U.S. savings, so U.S. net investment fell over the past three decades from more than

7% of GNP to about 5% of GNP. Furthermore, that inflow isn't guaranteed. If there is one precept most economists swear by, it is that America must save more in order to invest more.

But how much should we save? And what is the best way to save more?

There is no optimum level of saving, and economists are loath to recommend one. They don't even agree on how to measure savings. Some want to include consumer durables, while others want

WITH PRIVATE SAVINGS STILL WEAK.



DATA: GOLDMAN SACHS & CO., BW

make allowances for appreciating values of assets such as homes and investment portfolios. But no matter what yardstick is used, the clear trend in national savings in this country has been down. Here are the key reasons why it has eroded, and what can and can't be done to reverse the trend:

■ **The budget deficit.** First and foremost in the minds of most economists is the role the federal government has played in robbing capital from the private sector. National savings consists of two things: what the government saves, its budgetary surplus, and what the private sector stashes. For many years, and to a marked degree in the 1980s, government saving has actually amounted to "dissaving," since the federal gov-

ment is spending more than it takes thereby putting the budget in deficit. Cutting the budget deficit from its current level of \$163 billion, which amounts to more than 3% of GNP, would be a long way toward restoring national savings to its postwar high. "The easiest way to raise the savings rate is to cut the deficit," says David Wyss, an economist at DRI/McGraw-Hill. Of course, if private saving were high enough, it would offset government dissaving: Japan runs a small budget deficit, and is a net exporter of capital because of high levels of private saving.

Changing demographics. Private saving consists of personal savings, business savings (retained earnings), and state and local pension surpluses. The latter two have been stable to slightly higher in the 1980s, so it's the income of individuals that's fallen, not spend, that's fallen, dragging private savings down in the 1980s. Demographic forces may be partly responsible.

If you believe, as many economists do, that people's spending and saving are

It now appears that IRAs may have been a pretty good way to increase saving after all

■ **Tax policy.** Both spending and saving decisions are affected by tax policy—that is, by whether the tax code provides inducements to borrow (and hence spend), and whether it offers incentives to save. In the U.S., spending is favored. Tax cuts, such as those enacted in 1981, feed into consumption and help to goose the economy. And long-standing features of the code, such as the tax-deductibility of consumer and mortgage interest, encourage more consumption at the expense of saving. "In other countries, you have to save more before you can spend," says DRI's Wyss. Even the elimination of consumer-interest deductions isn't expected to change spending

tive savings incentives can be after regulations governing retirement accounts were liberalized in the 1970s, allowing much higher contributions. The personal savings rate there climbed about four percentage points over about 15 years, and around half that gain in savings was directly attributable to incentives, says Chris Carroll, a graduate student at MIT. Heavy promotion of the retirement accounts may also have helped create a new prosaving atmosphere, say Carroll and Lawrence H. Summers of Harvard University in a study of how U.S. and Canadian savings rates diverge.

■ **Vive la difference.** By some measures, the Japanese save at twice the rate Americans do, and the Italians at three times the rate. There are good reasons, however, why others save more. In Italy, for example, where people squirrel away more than 20% of their income, those savings finance huge budget deficits. The government ensures that it is able to siphon off the public's cash by paying high rates on its debt instruments. Furthermore, unreported income in Italy may show up in higher savings. In much of Europe the credit markets aren't as highly developed as in the U.S., which forces people to save more before they can spend. In Japan, government and corporate pensions are not as comprehensive or generous as in the U.S., so precautionary saving is higher. And Japanese home buyers must fork over about 50% of the purchase price of a home as a downpayment, so they save assiduously.

Indeed, some of these cross-border differences suggest that U.S. savings will continue to be lower than those in other industrialized nations. "The insurance environment has changed," over the past couple of decades, says Laurence J. Kotlikoff, a Boston University economist and author of *What Determines Savings?* Social Security, health benefits, and annuity insurance reduced uncertainty about the future, so people cut back sharply on precautionary saving, he says. That may account for as much as a quarter of the decline in the savings rate in the 1980s, and it could represent a permanent shift.

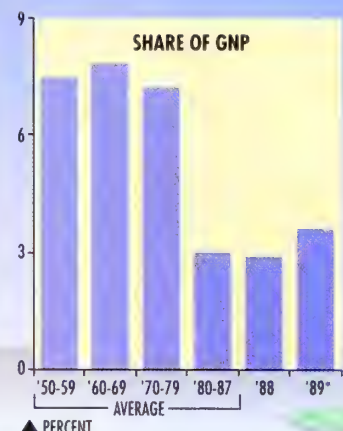
But that still leaves much of the decline in saving as potentially reversible. The shortfall in national savings isn't likely to right itself without some help, and for now, most of the help is coming in the form of foreign capital. That may be a temporary solution, but not a satisfying or lasting one. Domestic savings must rise to finance new investment. If not, those who live for the present may find that the future holds less to enjoy.

By Karen Pennar in New York

THE GOVERNMENT STILL 'DISSAVING'...



...TOTAL SAVINGS REMAIN HISTORICALLY LOW



* FIRST QUARTER

determined by age and income, then this life-cycle analysis explains some of the savings slowdown: In the 1980s, baby boomers were entering a heavy consumption period, as they bought homes and started families. But in the 1990s, when this segment of the population starts entering middle age, earnings more, and has fewer expensive outlays, savings should soar. Economist Edward J. Gardini at Prudential-Bache Securities Inc. believes the personal savings rate would top 10% by 1993. A small rebound may already have begun. Personal savings jumped to 5.7% in the first quarter, from 4.2% in 1988 and 3.2% in 1987. But economists believe technical factors, such as a jump in farm income, helped boost the rate.

patterns much: Many borrowers can make up the difference with larger mortgages or home equity loans.

Tax incentives can also induce extra saving, economists believe. It now appears that tax-deferred savings accounts, known as individual retirement accounts, or IRAs, may have been too hastily criticized as a poor vehicle to increase saving. Some economists now believe IRAs did spur new saving in the 1980s. And most contend that such experiments must be tried for several years to take hold. Some economists fret that consumer behavior is not easily modified, and that years of strong spending will not easily give way to a newfound gospel of thrift.

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A SOFT LANDING WILL SEND THE MARKET SOARING

As evidence of a cooling economy rolls in, investors scoop up stocks

Those who still bear the slings and arrows of outrageous October, 1987, may not have noticed it. But the stock market has pulled itself to within shooting distance of its all-time high. The big question: Can the rally last? Despite widespread investor skepticism, the answer is yes—if the economy can slow without crashing into recession. That's a deft maneuver called a "soft landing," and it's what Wall Street wants to see.

"A soft landing has stunning implications for the stock market," says Stephen Leeb, editor of *Indicator Digest*. "You'll see numbers far higher than anyone else has forecast." If inflation drops to the 2%-to-3% area, about half the recent rate, Leeb says, the Dow Jones industrial average could run up to the mid-3000 range—a target much bandied about but never reached during the bull market. Adds Leeb: "We have a good chance of a soft landing."

SNAPPY ACTION. Few Wall Streeters are as bold as Leeb, but they have been accumulating stock just in case the soft landing scenario falls into place. In the past eight weeks, as the evidence of a slowing economy started to roll in, the Dow climbed over 200 points, or about 10%. About one-quarter of that move occurred on May 12. The market surged 57 points on some of the heaviest volume seen all year. The broader Standard & Poor's 500-stock index climbed 2%.

The reason for the big rally was simple: The producer price index, a key inflation indicator, turned in a 5.5% annualized rate of increase for April—the second month in a row for that rate. That may not sound like much of a victory against inflation—unless it's compared with the January and February PPIs that showed frightening 12.6% annualized rates of increase.

Investors apparently liked what they saw. Stocks rose an additional 23 points by May 17, bringing the Dow to 2462, more than 700 points above its closing price on the day of the crash. "I'm a little bit hesitant to subscribe to the view of a 'soft landing,' and I'm not convinced that inflation has been killed," says

James E. Kamphoefner, of First Chicago Futures Inc. "But I'm not standing in the way of the market, either."

Although the market has already racked up better returns than forecasters had predicted for 1989, the latest surge seems joyless. Gail M. Dudack, a market analyst at S. G. Warburg & Co., says that the rising market isn't taking as many stocks with it as she'd like to see. "What's moving are 'whisper stocks'—anything with a good story attached to it," she says. During the bull market, all but the very worst stocks climbed. Now, the most widely held institutional stock, IBM, is scarcely higher than its 1987 low (page 76).

Even those money managers who have beaten the market this year, such as Bill Harnisch, president of Forstmann-Leff Associates, are puzzled about where the impetus for the next step up will come. "The upside potential is limited from here," he says.

Look at Norman G. Fosback, editor of *Market Logic*. He turned bullish in late 1987, when many advisers were still under their beds, and has stuck with the market ever since. Fosback is not dumping stocks, but his indicators are no longer bullish. He says valuation yardsticks such as price-earnings ratios and dividend yields indicate that stocks are neither cheap nor expensive. And mutual fund cash reserves, a source of buying power, have declined to 8.8% from 11% since January. "It's hard to get excited when indicators are in neutral," he says. Fosback would become bullish only again if he had some evidence that the Federal Reserve Board is easing monetary policy.

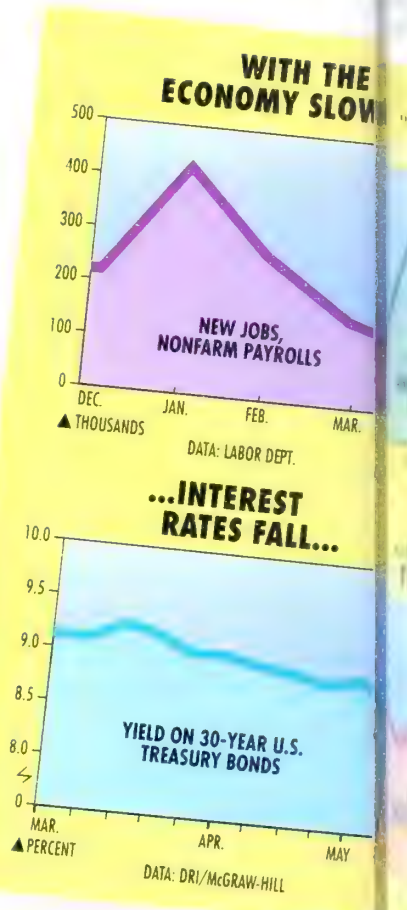
The soft landing aficionados think that will happen soon. They argue that the economy is slowing dramatically—in new jobs, homebuilding, and consumer spending. Under such conditions, the Fed will have to open the money tap.

The fixed-income markets may have anticipated such a move. Rates on 90-day U. S. Treasury bills fell to 8.57% by May 17, down from 9.3% less than a month earlier. Long rates, which reached a high of 9.32% in March, slid back to

8.8%—near the lower end of the range that has persisted for months. If long-term rates drop and remain below 8.75%, say market analysts, it will be further evidence of a soft landing in the world.

Lower interest rates usually mean a lower dollar, but this time around, the greenback has surged to its highest levels in nearly three years (page 26). That makes the soft landing forecast much more likely. Several times in the past few years, the Federal Reserve has had to keep interest rates high to bolster the dollar. Now, with the dollar so strong, the Fed can allow interest rates to fall without worrying that the foreign exchange markets will beat up on the greenback.

The stronger dollar in itself is a



for stocks and bonds. Foreign buyers who have been scarce since October, want to own dollar-denominated securities again. Japanese investors took about one-quarter of the \$9.5 billion U.S. Treasury bonds in the recent auction.

The 57-point rally caught the eye of equity investors, too. "We've been waiting for a signal," says Shigekazu Shimada, director of international investment at Nikko International Capital Management Co. "Japanese investors think a soft landing is possible." Nomura Securities Co. advised customers to buy stocks and booked orders for \$110 million worth in one day. And smart Europeans have been quietly loading up on equities for months (BW-May 22).

The latest economic data have led some of the Street's more bearish strategists to throw in the towel. Steven G. Einhorn, a partner and portfolio strategist at Goldman, Sachs & Co., told his institutional clients to step up their stock buying. "There's a heightened probability of a soft landing," he says. Edward M. Kerschner, chairman of the investment policy committee at PaineWebber Inc., also advised clients to boost their equity holdings. Among his choices are companies with a record of reliable profit growth: Abbott Laboratories, Baxter International, Browning-Ferris Industries, Emerson Electric, General Electric, and NCB. "We would appear to be two-thirds of the way toward a soft landing," he says.

'HOW FAR IS DOWN.' Einhorn says his conditions for a soft landing call for a slowing economy, a moderating inflation rate, and stabilizing or dropping interest rates—all of which have been met. One more ingredient for a favorable stock market response, he insists, is that corporate earnings meet Wall Street's expectations.

Falling short of the Street's forecasts can be disastrous for a stock. Even as the market rallied on May 15, Hewlett-Packard Co. plunged \$3.75 a share, about 6.6%, because the company said its second-quarter earnings would be better than 1988's but still a little shy of analysts' 1989 forecasts. Kerschner, too, fears that if earnings don't hold up, neither will stock prices. On the other hand, if corporate profits hit the Street's targets this year, Kerschner says the Dow could reach the 2750-to-2900 zone.

Although the soft landing idea is gaining favor, many big investors say recession is more likely. "The soft landing is just wishful thinking," says James P.

Owen, managing director of NWQ Investment Management Co. "With an economy growing the way ours has been, the Fed has never been able to make it happen." Adds Peter S. Hagerman, managing director of Hallmark Capital Management: "Once the economy starts to weaken," he says, "you never can know how far is down." Hagerman is playing it safe with companies whose fortunes are not closely tied to the economic cycle: Lockheed, Philip Morris, Humana, Pfizer, and Syntex.

Even professional investors who accept the "slow growth, no recession" outlook are keeping their checkbooks closed. For one, short-term interest rates are still very high. "We don't have to spend every last dollar on equities," says H. Richard Vartabedian, head of invest-

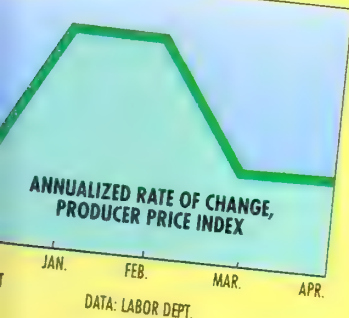
Foreign buyers, who have been scarce since the crash, want dollar-denominated securities again

ments at Chase Manhattan's private banking group. "We're getting paid quite well just to wait." Thomas M. Kersey, chairman of Palm Beach Capital Management Ltd., is buying stocks, but mostly from lists of familiar high-quality companies with steady earnings growth: Coca-Cola, PepsiCo, Walt Disney, Sara Lee, Bristol-Myers, Johnson & Johnson, and Merck.

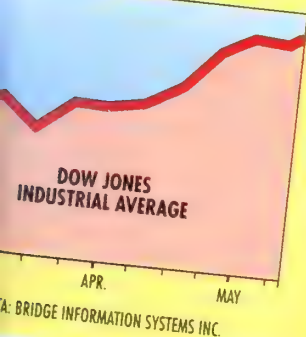
Skepticism about the soft landing and the stock market has an upside, of course. Markets tend to run contrary to the crowd. Even as stocks began to decline in September and early October of 1987, investor sentiment stayed bullish—and look what happened. For that reason alone, some investors are buying equities. But a new bull market will depend on those two magic words: soft landing.

By Jeffrey M. Laderman in New York, with bureau reports

...AND INFLATION EASING...



...AND STOCKS FORGE AHEAD



THE MANY INCARNATIONS OF BARRY DAVIS

Run-ins with regulators—and now a penny-stock probe

Sometimes, when you reach out and touch someone, you can't be quite sure of exactly who is on the other end. Take, for example, Barry K. Davis, the fast-talking proprietor of Traders & Investors Alert, the hot, new stock-tip telephone service (BW—May 22). While Davis has attracted hundreds of subscribers in just five months, he appears to be as good at burning bridges as he is at scorching the phone lines. Not only has he been permanently barred from the securities industry since 1971, as *BUSINESS WEEK* reported, but he was subsequently kicked out of the insurance business by New York State.

And Davis' tangles with the regulators may just be beginning. In following up calls prompted by its original story, *BUSINESS WEEK* has learned that Davis' home and office were raided by the Federal Bureau of Investigation last November. The reasons for the search, and the results, have not yet been made public.

At the time, Davis headed his own Fort Lee (N.J.) public-relations agency that was promoting a penny-stock firm now under investigation by federal authorities, Davis says. He refused to name either the penny-stock firm or his PR agency. "Just because I got raided doesn't mean I'm guilty," he says. "I was in the wrong place at the wrong time, [promoting] the wrong stock." New Jersey state regulators are cooperating with the FBI, sources close to the investigation say. The Securities & Exchange Commission is also investigating Davis.

NAME GAME. Regulators are examining Davis' possible role in penny-stock schemes allegedly masterminded by Eric M. Wynn, who was indicted in May, 1988, by a federal grand jury in Newark, N.J. Wynn, his wife, and Francis LaMagra of Paramus, N.J., have been accused of defrauding investors of \$640,000 in a now-defunct jewelry company, Renaissance Enterprises. The Wynns and LaMagra pleaded not guilty to all charges but could not be reached

for comment. Davis says he has been unfairly targeted. The only link, he says, is that "Wynn is a friend of mine." The FBI searched his house, Davis says, to pressure him to "rat on a friend."

This is not Davis' first contact with penny stocks. Before he started the hot line, Davis' public-relations agency also promoted Boardroom Business Products, a small computer retailer. The company made a public offering in September,



■ DAVIS: HE IS CURRENTLY RUNNING A HOT, NEW STOCK-TIP TELEPHONE SERVICE

1988. The stock, once at \$6, plummeted to 10¢. The company entered Chapter 11 bankruptcy proceedings last January. Davis says that he was just paid a fee to publicize the company and had nothing to do with its problems.

No one has accused Davis' current hot line of being improper. But he has remained closely involved in the securities business, from which he is banned. As Barry K. Sutz—his name before he changed it to Davis—he surfaced in 1986

in connection with the now-defunct penny-stock firm Rooney Pace Inc. According to the Missouri Securities Commission, Sutz could be reached by telephoning Rooney Pace. The state ordered Rooney Pace to cease and desist employing unregistered agents. Rooney Pace denied that Davis had ever been an employee, and Davis denied any involvement with the firm.

HUNDREDS OF COMPLAINTS. In May 1975, the New York State Insurance Dept. yanked Davis' insurance license, which he used to operate Sutz & Sutz, chiefly a car-insurance agency. "He was one of the first brokers to solicit young driver when nobody was interested in these people. Most of this market was very vulnerable," says Salvatore Castiglione, the New York insurance department's principal examiner.

Based on hundreds of client complaints, Davis was charged with several offenses, everything from failing to provide insurance coverage to failing to return premiums on canceled policies. "He took the money, and they never got insurance," says Castiglione.

Working out of an office in New York's Long Island, Davis nevertheless stayed in the business for more than two years. He was even licensed to represent leading insurance companies, such as Hartford Life Co. and Aetna Life Insurance Co. In fact, his downfall was that he couldn't keep up with demand. A 1974 television-ad campaign increased business by 50%, and Davis couldn't handle the volume, according to insurance department records.

Davis concedes that the firm "wrote too much insurance, and the business went bad." When some insurance companies he represented started canceling all policies, "the markets tightened, and he couldn't get coverage for his clients," he adds. "People may have lost money, but not from me," says Davis, who claims he sold the company before problems arose. New York Insurance

Dept. records, however, say that Davis was unable to sell Sutz & Sutz before he revoked his license.

Now, as Davis is trying to sell brokers on paying as much as \$10,000 a year to get in on his stock tips, he is already planning a major expansion to reach individual investors. If the past of Davis née Sutz, is any prologue, investors may already have the only tip they'll need.

By Leah J. Nathans and David Zigan
New York

WHAT'S SAM SPADE LEAFING THROUGH THE LEDGERS

Takeover battles, private eyes are digging up crucial dirt

He called himself Ed Logan. For a week in January, his home was Room 109 in the Embassy Suites hotel near Los Angeles International Airport. He spent his time on the phone, calling anyone who may have known Uri Weinbaum and Donald J. Brumlik. Two weeks later, he had answers: Brumlik had filed for personal bankruptcy in 1980, had been disbarred from practicing law in Illinois, and was married to two women at the time. Logan had done his job well.

Logan (probably not his real name) was working for Intertel, a private investigator based in Rockville, Md., that Del Webb Corp. says it had retained. The homebuilder was checking out Weinbaum and Brumlik because they headed Calmark Financial Corp., a group in Los Angeles that made a \$156.4 million bid for Webb in November.

"We needed to know who we were dealing with," says Webb chairman Philip J. Dion, whose company has hired private investigators five times in the past year to uncover sensitive information on suitors. Brumlik, for his part, agrees it's all true but says he was unaware of a clerical error that delayed the divorce from his first wife. Webb's charges were contained in a lawsuit, which sought to enjoin the takeover unless Calmark amended its securities filing to include the new information. The company ultimately dropped the lawsuit. Although Brumlik says the findings didn't deter his group from arguing its financing, Calmark withdrew its bid on Apr. 25.

SE RUMORS? More and more, private investigators are taking their place in the takeover arena right alongside the investment bankers and lawyers. Much as they fight in a divorce or blackmail case, these everyday Sam Spades track down confidential sources and pore over public documents. In big-bucks takeover battles, the intelligence they glean can be crucial to management responds to the threat. The acquirers have the money to make a bid? Or are they simply trying to jack up a stock's price for a quick profit? Do they, perhaps, have a blemish that could hurt them dearly in terms of investor sup-

port if it were to become widely known?

"We're a management tool, offering information that the companies factor into any decision that they're going to make," says Jules B. Kroll, head of New York-based Kroll Associates. More controversial, some private eyes engage in covert operations, such as—allegedly—planting false rumors about the opposition.

Whatever they do, private investigators do it for a lot less than the other mergers-and-acquisitions professionals. Most ask for about \$100 an hour, while a top-drawer law-



yer might charge \$500 an hour, and an investment bank may divvy up tens of millions among a few dozen staffers. Kroll, the most publicized investigator, charges by the job; a quick check can run \$100,000. When a lengthy takeover defense required even more extensive detective work, Kroll's bill has been \$6 million. Kroll, who expects 1989 revenues of some \$50 million, says M&A is nearly 20% of the work for his staff of about 200 people.

Digging up dirt, of course, doesn't guarantee that a company will stay independent. Kroll was called in last December when two investor groups filed a tender offer of about \$758 million to buy Pennwalt Corp., the chemical company. His detectives learned that Abbey J. Butler, a

key investor, hadn't disclosed that he had filed for personal bankruptcy once and, after securities law violations, had been denied a license to operate a radio station. The Butler group amended its offer to include the new information and went ahead with the bid anyway. In March, Pennwalt accepted a friendly \$1.04 billion bid from French oil company Société Nationale Elf Aquitaine. Butler's group gained an estimated \$65 million on its shares.

'POLITICAL CONTESTS.' Naturally, a raider doesn't come into battle unarmed, either. United Intelligence Inc., a New York agency that once located Iranian assets in the U.S. for the Ayatollah Khomeini, has represented the Bass brothers, Richard Rainwater, and H. Ross Perot (box, page 98). The objective, says Unitel President William P. Callahan, is to find corporate misuse of a company jet or something else that will cast doubt on whether the current management deserves to stay in power. Such information can be vital in proxy fights, he says: "Those are really like political contests. That's when the mud is really slung."

While takeovers spark much of the new demand for corporate sleuths, many companies routinely use them to vet prospective business partners—sometimes with dramatic results. In 1987, Drexel Burnham Lambert Inc. asked Terry F. Lenzner, head of Investigative Group Inc. in Washington, to look into the past of Barry Minkow, the 21-year-old carpet cleaning mogul. Minkow wanted Drexel to raise \$25 million in junk bonds for him, but Lenzner warned Drexel off. He had discovered that some of Minkow's associates had criminal records. Minkow himself was later arrested and convicted on 25 counts of conspiracy and fraud and was sentenced to 25 years in prison.

Detectives have been accused of wiretapping and break-ins. Kroll and Callahan both stress they do nothing illegal. But the nature of their work leaves detectives easy prey for allegations of wrongdoing. In the most serious case yet against one of them, lawyers for Los Angeles-based Guess Jeans complained that a detective employed by rival Jordache Enterprises Inc. planted false papers alleging that Georges Marciano, a Guess principal, had been arrested in Marseilles, France, in 1982 for using explosives. The object, Guess charges, was to get Marciano deported from the U.S. to weaken Guess and leave it easier to take over. In a deposition, Octavio Peña, a Fort Lee (N.J.) private eye, denied he planted the papers or that he ever discussed Marciano with immigration officials.

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Finance

person's past, however, can sometimes put the investigators in the glare of unwanted publicity. During a 1988 proxy battle, financier Burt Sugarman complained to reporters that singer Helen Reddy, then mired in a long divorce proceeding against a top Sugarman aide, was interviewed by Kroll detectives hired by opponent Media General Inc. During his 1984 battle against Phillips Petroleum Co., T. Boone Pickens Jr. won an order—overturned in 24 hours—restraining Kroll's detectives from talking to his school-age children.

As the takeover business becomes more lucrative and complex, new sleuthing needs are popping up. Donald C. Carter, head of Carter Organization Inc., a proxy-solicitation firm, says companies increasingly are calling in private eyes to do back-

ground checks on their own candidates for board seats. "With everything that's going on with insider trading and other illegal charges, everyone is looking carefully at anyone that's going to represent the company," Carter says. "That means hiring detectives before it's too late."

Meanwhile, Jules Kroll is hedging against an end to the takeover bonanza. To diversify, he has bought a firm specializing in finding illegal dumpers of toxic wastes. Still, as long as there are high-stakes takeovers, there will always be Ed Logan squirreled away in some hole, looking for skeletons in someone else's closet.

By Ronald Grover in Los Angeles, and Joseph Weber in Philadelphia and Keith Hammonds in Boston

THIS GUMSHOE DOES HIS LEGWORK IN WING TIPS

Dirty Harry" Callahan, the tough cop that Clint Eastwood plays in the movies, has found himself in a lot of tight spots over the years. So has William P. Callahan, 53, president of United Intelligence Inc. (Unitel) and a prime example of a private eye who is as much at home in boardrooms as he is in rough bars.

Callahan's cluttered office is on New York's Park Avenue, but his work takes him to intimidating surroundings. A few years ago, he was hired by a motorcycle parts manufacturer being undercut by knockoffs. The job required visiting a bar in Queens, N.Y., that was a hangout for the local chapter of Hell's Angels. Dressed in a business suit and necktie—and with a .38 caliber pistol under his belt—Callahan approached a gang member he suspected was involved with a parts-counterfeiting ring.

MOONIES RESCUED. Under the eyes of about 40 Angels clad in the gang's black motorcycle jackets and chains, Callahan quietly asked him to step outside for questioning. "At first, he thought I was crazy," Callahan says, "but he cooperated. Our conversation lasted four minutes. I told him if he didn't talk to me he'd be going to jail. Then he followed me on his motorcycle" to a hotel to provide more details.

Callahan's cases are, if anything, more diverse than those of a fictional detective. For Sun Myung Moon's Unification Church, he has helped retrieve young recruits from deprogrammers hired by their parents. When Carl C. Icahn was trying to take over Texaco

Inc. last year, Callahan says that Icahn had him check out dozens of letters from disgruntled employees offering sensitive information. And some Icahn's lawyers, fearing that Texaco might have had their hotel room bugged, had "my associates and crawling under their beds." (Search result: negative.)

Callahan, who studied law for 10 years at St. John's University in Queens, started out clerking for Robert M. Cohn and worked at the New York law firm of Nixon Mudge Rose Guthrie Alexander & Mitchell when partner Richard M. Nixon was running for President in 1968. While Nixon was in office, Callahan was asked to see whether others were plagiarizing Nixon's writings and speeches. With the Justice Dept. for six years, he specialized in narcotics and white-collar cases.

Wanting to work for himself, Callahan founded Unitel in 1977. "I've seen him succeed where law enforcement people are stymied," declares an executive who has frequently used Unitel. Business is booming for Callahan and a 10-person staff that consists mostly of former law-enforcement officers. Revenues, which he says have tripled in recent years, "are well over \$1 million." Noting that "white-collar crime never slows down" and that terrorism and globe-girdling takeovers are becoming commonplace, he figures that "we'll become much more international.... We'll be growing in the way that accounting firms and law firms are growing."

By Jon Friedman in New York

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BY GENE G. MARCIAL

THE BIG WHEELS THAT MAY BE AFTER GOODYEAR

Two years ago, Goodyear Tire & Rubber fought a costly battle with corporate raider Sir James Goldsmith—and won. But a swirl of new takeover rumors say it may face combat again.

A large Japanese industrial company and two European giants, including Pirelli, the Italian tiremaker, are whispered to be seriously interested in acquiring or merging with Goodyear, the world's largest tiremaker. Last year, Pirelli went after Firestone Tire & Rubber, another U.S. producer, but lost out to Bridgestone.

Texas financier Harold Simmons is also rumored to be involved, but he has denied any interest in Goodyear. "Don't bet on the stock breaking down because of that," says one big investor. He insists that serious accumulation is going on, as reflected in Goodyear's recent upward kick accompanied by substantial volume. The stock hit its all-time high of 76 in 1987. Now it trades at 53 (chart).

One takeover investor sees little downside risk in buying Goodyear despite the recent advance. He figures the company has a private-market, or breakup, value of \$75 a share—and "that's without taking into account the famous name and worldwide franchise network." Goodyear would be worth even more to a foreign acquirer, this investor believes. Its chemical, plastic, and industrial division—which accounts for only 13% of sales and 15% of profits—could fetch more than \$1 billion, he estimates, or about \$18 a share.

COSTLY ESCAPE. Another takeover analyst argues that a foreign company won't be put off by Goodyear's huge debt of more than \$3 billion, which was taken on to escape Goldsmith. With working capital of about \$1 billion and estimated cash flow of \$850 million, or \$14 a share on estimated sales of \$11 billion, Goodyear's debt service is quite manageable, this analyst believes.

But even without the takeover allure, Goodyear is a "good and promising long-term investment," says Jim Bird, a portfolio manager and analyst at Gintel & Co., which has been buying shares. Goodyear is one of the few cyclical companies around that's sure to see strong earnings growth this year,

GOODYEAR BOUNCES UP AGAIN



says Bird. Why? In spite of lackluster auto sales, tire prices are up, raw-material costs have plateaued, and Goodyear expects 5% to 6% productivity gains for 1989. The company posted a poor second half last year, so an earnings comparison with the second half of 1989 will show a nifty increase, he believes. Based on the earnings turn alone, says Bird, the stock is likely to rise to 65 within the year.

LOW-COST HDTV THAT BEATS JAPAN'S?

Summa Medical is an obscure Albuquerque-based research outfit. But it has caught the attention of the nation's biggest technology, aerospace, and pharmaceutical companies. About 20 of them, including foreign companies, have signed agreements of confidentiality with Summa Medical to assess Summa's proprietary technology.

What does this tiny newcomer have that these companies want? A technology that Summa says will help produce relatively low-cost high-definition television, believe it or not. Chairman and President Frank Urrea Jr. says the system, invented by Summa's Iben Browning, uses computer-aided technology to enhance images without having to alter existing U.S. broadcasting standards. Urrea notes that the HDTV currently available in Japan will require changing U.S. broadcasting transmission systems to work here.

Summa's setup generates images of a quality exceeding any HDTV standards currently under consideration or use, says Joseph Zanetti Jr., president

of Summa's Foresight division, which is in charge of the HDTV project. Summa's technology uses a novel method of producing images without phosphors, liquid-crystal displays, or fiber optics, he says, adding: "We have proof of the concept, and we have produced a lab-bench model."

Summa is looking for a licensee to adapt the technology for HDTV. "We have a monochrome prototype by the end of September, and we'll be entertaining prospects for licensing," says Zanetti. He won't name the companies that have expressed interest in such licensing pact but adds that even the big aerospace companies are taking a look, since the system has potential for commercial and military use.

All this activity is showing up in the stock, which trades over the counter. Shares jumped from around \$2 a share to more than \$3 in about a month.

READING WESTERN'S FUTURE

Many asset-value players bailed out of Western Publishing Group in a hurry last October when Gulf & Western and Western Publishing broke off talks. The stock fell from 22 to 16. But now some of those who fled are buying again. The stock has rebounded to 20 and should go even higher, says a takeover pro.

Rumor has it that another publisher is preparing to make a bid for Western. And this time, a deal is likely to be struck. Why? One big Boston investor who owns a 4% stake, says that Chairman and CEO Richard Bernstein wants to sell—but not to raiders or leverage buyout artists who would surely break the company apart. Several entertainment companies with publishing interests are eyeing Western, too.

This shareholder believes that Western, the nation's largest publisher of children's books, is worth about \$36 a share based on its assets, cash flow, and earnings. Earnings for the fiscal year ending Jan. 31, 1989, grew 20%, to nearly \$30 million, or \$1.45 a share, and sales jumped from \$457 million to \$500 million.

Here's how he values Western's assets: Golden Books division, which includes the Pictionary game, \$670 million; Beach/Contempo unit, which produces stationery and paper napkins, \$42 million; and commercial printing and creative publishing, \$78 million. Total value, after deducting debt of \$80 million: \$729 million, or \$36.50 a share.

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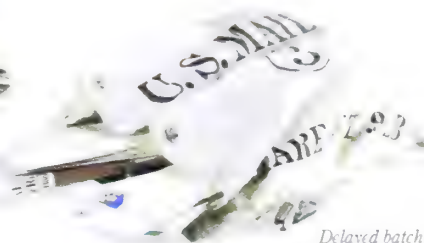
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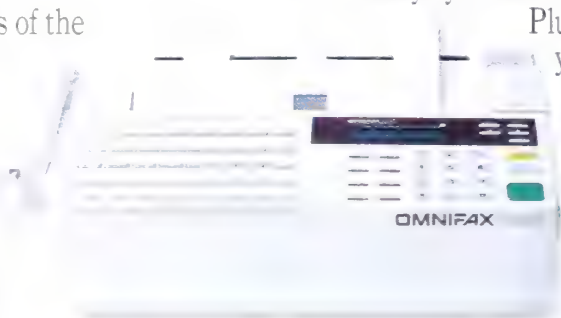
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A SHINY NEW WEAPON IN THE WAR ON CANCER: LIGHT

Photo-activated drugs destroy tumors—but not other cells

Physicians in ancient Egypt noticed that people who ate a weed that grows along the banks of the Nile sunburned easily even if exposed to indirect sunlight. And they found that the plant could treat a blotchy skin disorder called vitiligo.

What the Egyptians didn't know was that light hitting the skin turned a normally benign substance in the plant into a potent drug. Several thousand years later, the active compound in this plant has become the model for a new class of light-activated drugs. Drugmakers are trying to turn photo-activated chemicals into highly specific weapons against a variety of serious diseases.

Already in advanced clinical testing are new drugs that can be targeted to destroy several types of cancer. These light-activated drugs may also soon be used to kill contaminants, such as the AIDS virus, in donated blood. "The beauty of light-activated drugs is that you can control them much more effectively than other drugs," says Richard L. Edelson, head of dermatology at Yale School of Medicine, which is testing the drugs against cancer. "As soon as you turn the light off, the drug reverts back to a harmless state."

KILLER OXYGEN. Modern research on light-activated drugs has been under way for almost 20 years. But the first big drug company to give these drugs a try was Johnson & Johnson. Scientists there developed Photofrin, a derivative of natural substances called porphyrins. Normally harmless, porphyrins are part of the hemoglobin in red blood cells. But when they are stripped of their iron core, they produce a highly toxic form of oxygen that destroys cells when they are exposed to light.

In 1985, J&J set up a company called Photomedica Inc. to market its light-activated drug, but after two years of struggling with regulatory problems, Photomedica was put up for sale. James J. Miller, president of Quadra Logic Technologies Inc. (QLT), a Vancouver biotechnology company, and four fellow scientists at the University of British Columbia jumped at the chance. Backed by a promise of \$20 million from American

Cyanamid Co., Quadra Logic in 1987 bought Photomedica and the patent rights to Photofrin.

Now, QLT is testing the substance on cancer patients at more than 50 centers. The company hopes to begin marketing Photofrin through Cyanamid's Lederle

oretically, the power of the technology for killing cells is truly remarkable and can be far more devastating than chemotherapy," says Dr. Eli Glatstein, chief of radiation oncology at the National Cancer Institute.

What's making it possible to put li-

activated drugs to work are medical lasers and fiber-optic probes that can deliver the specific wavelengths of light needed to activate the drugs directly to the cancerous tissue. To treat cancer, the drugs are first injected into the patient, where they collect in tumor cells but are slowly expelled from nearby healthy cells.

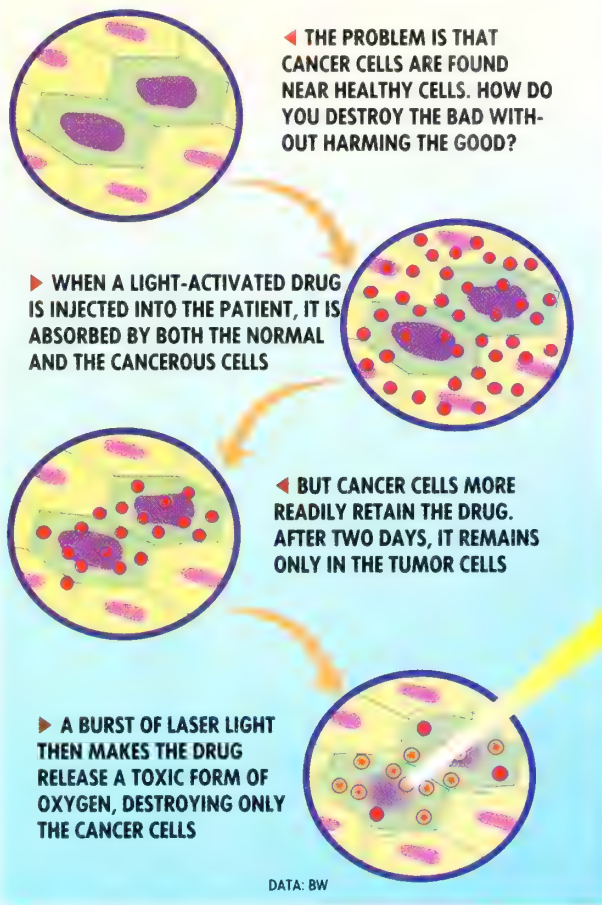
Two days later, laser-powered light is channeled through a fine fiber-optic probe to the cancer site, where switches on the drug. The affected area, of course, must be accessible to the light. The wavelength of light that activates Photofrin penetrates only a few millimeters into tissue, so the treatment will only work on deep tumors. And there is the same vexing side effect that alerted the Egyptians: Patients run the risk of severe sunburn unless they stay out of the sun for at least a month.

Still, in tests Photofrin has been successful against some kinds of

bladder, skin, lung, and esophagus cancers. And Quadra Logic says it has developed another substance that overcomes some of Photofrin's difficulties.

A recent entry into light-activated drugs is U.S. Bioscience Inc., a biotechnology company in Blue Bell, Pa., which has teamed up with Eastman Kodak Co.

HOW LIGHT-ACTIVATED DRUGS KILL CANCER



Laboratories in 1992. Unlike radiation or chemotherapy, the light-activated drug kills only the cancerous cells and leaves healthy tissues intact. That's because it accumulates in cancer cells, not normal ones. So treatment can be repeated frequently without damaging nonmalignant cells and endangering the patient. "The-

ough U.S. Bioscience has not yet
n tests on humans, it is experiment-
with a group of Kodak dyes called
iums. These are turned on by light
longer, more penetrating wave-
ch, so they may be effective against
er tumors. Also, U.S. Bioscience is
ing on a technique that would deliv-
drug directly to the tumor, avoid-
sensitizing the skin to sunlight.

DD-CLEANING. Looking toward the
re, scientists at the National Cancer
tute and at QLT are exploring another
lea: photo-activated drugs that pro-
their own source of light. The scien-
goal is to eliminate lasers
gether by binding the photo-active
to a light-emitting substance called
eriferin—the luminescent compound
by fireflies. When the drug is con-
rated in the tumor cells, luciferin
d be turned on by injecting an en-
e into the patient, making it possible
each tumors anywhere in the body
out surgery. "This will be the ideal
g to develop," says Dr. Stuart L.
cus, Lederle's clinical project manag-
something to really salivate about."
eanwhile, light-activated drugs may

Theoretically, the power
killing cells is remarkable,
'far more devastating
than chemotherapy'

take on other medical tasks. QLT is
tiating a joint-venture contract with
ter International Inc., whose Baxter
enol Laboratories is a leading pro-
r of blood bank supplies and prod-
. If the deal goes through, the com-
es will try to develop a system that
enable blood banks to clean blood of
s and hepatitis viruses, among oth-
They could save millions of dollars
not having to destroy tainted blood—
eliminate the risk to donors.

he idea is to mix the light-activated
g into the blood and then hit it with a
st of light. In laboratory tests, the
g seems to kill the viruses without
ining the blood cells. QLT's Miller es-
ates that the blood bank market for
system could top \$160 million a year.
n addition, the new drugs may offer
tment for venereal warts, the fast-
growing sexually transmitted dis-
e. There's also hope that they may be
d to unclog arteries—possibly becom-
an alternative to bypass surgery.
it's already clear that from the
ks of the Nile has come a potent new
s of drugs.

By Stephanie Yanchinski in Toronto
Naomi Freundlich in New York

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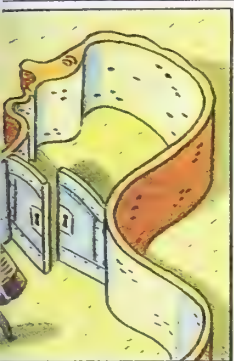
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D EMILY T. SMITH

BEAKING DOWN THE BARRIERS AT BAR DRUGS FROM THE BRAIN



It would be a lot easier to treat neurological disorders, cancer, AIDS, and a host of other diseases if drug designers could deliver drugs directly to the brain. But they are continually bumping up against the so-called blood-brain barrier. The system of capillaries that supplies brain cells with oxygen and critical nutrients also acts as a barrier to many chemicals found in the blood—including most drugs.

Now, for the first time, Al-
es Inc., a Cambridge (Mass.) biomedical company, has
oped a model of a human blood-brain barrier that will
its researchers design drugs to cross over into the brain.
artificial barrier is made up of a sheet of the endothelial
that line the brain's capillaries. Researchers are exploring
al ways compounds can cross the barrier: Fat-soluble
cances pass through the cells; others are carried across by
ins. According to Stuart P. Davidson, president of Al-
es, the artificial barrier should provide a quick and inex-
pensive alternative to animal tests when screening new drugs.

FI FO FUM, SCIENTISTS TELL THE BLOOD OF A BACTERIUM

You are what you eat, so are bacteria. Biolog Inc. in
yward, Calif., has come up with a way of using the
e menu of chemicals each bacteria gobbles up to quickly
ify hundreds of different types. The technology, which
company calls "breathprints," may aid in the detection of
ise and help spot contaminants in cheese or winemaking.
e group of 310 species of bacteria, so-called gram nega-
bugs that cause such diseases as influenza, pneumonia,
gonorrhea, consume a total of 96 different chemicals. But
bacterium eats a different combination. So the scientists
ed a culture plate with 96 wells, each filled with one of
chemicals and a dye. Samples of an unidentified bacterium
placed in each of the wells. If the bacterium metabolizes
chemical, the dye turns purple. By analyzing the pattern of
wells that have turned color and comparing it with a data
of patterns made by known bacterium, a computerized
ument can quickly match a name to the bug. An automat-
instrument that reads the culture plates and a personal
outer to analyze those bacteria sell for under \$14,000.

TERPILLARS DON'T COTTON THIS COTTON

A few weeks ago in Mississippi, some pretty unusual cotton
went into the ground. It's the first field test of cotton
has been genetically modified to resist insect pests. A
of scientists at Agracetus in Middleton, Wis., a joint
ure of Cetus Corp. and W. R. Grace & Co., inserted a gene
a common soil bacterium into the genetic code of the
on plants. The new gene causes the plants to produce a
in that kills caterpillars that feed on young cotton bolls.
the greenhouse, caterpillars that ate the leaves of the

altered plants either died or showed stunted growth. In the
field test, scientists hope that the built-in protection will help
prevent losses to the pests at the early stage in the plant's
development. If the test is successful, the new cotton plants
could lead to major savings for cotton producers and reduce
the amount of chemical pesticides needed to protect the crop.
In 1988, caterpillar pests cost U. S. cotton growers an estimat-
ed \$120 million for chemical controls and lost yield. If the test
goes well, company officials estimate that the insect-resistant
cotton could be ready for market in as little as four years.

LIGHT FIXTURES THAT REFLECT WELL ON THE BOTTOM LINE

Any sunbather who has used a reflector knows that the
shiny surface increases the intensity of the sun's rays.
Apply that principle to lighting, which accounts for 50% of
office building energy consumption, and it means big savings.

That's just what Pre Finish Metals Inc. has done. The Elk
Grove Village (Ill.) company has developed a reflective silver
material to install behind fluorescent lighting fixtures. Its
mirrored surface bounces light into the work area, cutting
fluorescent lighting costs by as much as 50%. White, painted
metal is generally installed behind fluorescent fixtures, but it
traps some light and converts it to heat. Install Pre Finish
reflectors, and two bulbs provide the same amount of light as
a standard four-light fixture.

Early this year McDonnell Douglas Helicopter Co. installed
the reflectors on about 7,000 fixtures. The company expects to
recoup the cost of installation, about \$45 to \$60 a fixture,
within nine months and save nearly \$250,000 a year on lighting
costs. Depending on utility rates, the reflectors can save \$18 to
\$70 per fixture in energy costs each year.

WHY JAPANESE CHIPMAKERS KEEP LEAPFROGGING U.S. RIVALS

Sematech's nightmares seem to
be coming true. The Austin
(Tex.) research consortium was
formed to restore the luster of
U. S. chipmaking, and one of its
central goals is to assure the con-
tinued vitality of American suppli-
ers of semiconductor production
equipment. But recently, Perkin-
Elmer Corp., the world's leading
producer of chipmaking equipment
during most of the 1980s, decided
to bow out.

Now, VLSI Research Inc., a San
Jose (Calif.) consultant, reports
that Japan's makers of production
equipment racked up solid market
gains again last year. Tokyo Elec-
tron leaped from the No. 6 slot in
1987 to No. 2 behind first-place Ni-
kon Corp. And Canon Inc. moved to No. 6 from No. 7. Just 10
years ago, the best that any Japanese company could manage
was 15th, held by the company that later became Advantest
Corp. Last year, Varian Associates Inc. was the only U. S.
supplier to move up on the top 10 list.

The trend worries Silicon Valley because new Japanese chip
equipment tends to be available to Japanese customers six
months or more ahead of overseas companies. In the frenetic
semiconductor game, six months can be a disastrous delay.

TOP 10 CHIP-EQUIPMENT MAKERS

1988	Company
1	NIKON
2	TOKYO ELECTRON
3	ADVANTEST
4	APPLIED MATERIALS
5	GENERAL SIGNAL
6	CANON
7	VARIAN
8	PERKIN-ELMER
9	TERADYNE
10	LTX

DATA: VLSI RESEARCH INC.

A free look in



Personal computing is going through a profound change.

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Should you stay on the path of Lotus® 1-2-3, the traditional leader in character-based spreadsheets? Or should you turn to Microsoft® Excel for Windows, the emerging stan-

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Model of Microsoft Excel. We predict it'll make choosing between character-based and graphics-based spreadsheets a good deal easier. However, if you're still trying to decide between the two, just bear in mind what attracted you to personal computing in the first place. Vision.

Microsoft
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KEEPING YOUR TICKER RUNNING LIKE CLOCKWORK

You've probably heard most of the conventional wisdom about how to avoid strokes and heart attacks. Stay away from salt and cigarettes, and you'll keep your blood pressure down. Steer clear of saturated fats, and your arteries won't become clogged with cholesterol deposits.

But if you're male, 20 years or older, still savor eggs, butter, steak, and ice cream, are 30% or more overweight, or have diabetes, your arteries may be hardening anyway. Especially if you smoke more than 10 cigarettes a day, exercise sporadically, if at all, and your family has a history of heart disease. For women, the risk increases after they reach menopause.

The first thing to do is have your cholesterol checked. If you have two or more of the risk factors and your total cholesterol level is somewhere between 200 and 240 milligrams per deciliter of blood, what doctors consider borderline, you may be developing coronary artery disease. Even if your total cholesterol level is "desirable" and under 200 mg/dl, you could be at risk.

PLAQUE ATTACK. More than 65 million Americans have symptoms of cardiovascular disease, according to the American Heart Assn., and 25% of them are in the high-risk category. Coronary atherosclerosis, more commonly known as hardening of the arteries, eventually leads to heart failure and is responsible for more than 550,000 deaths in the U.S. annually.

Assuming you don't have a genetic disorder, the disease results, very simply, from a combination of overdosing on saturated fats and not getting enough aerobic exercise.

That's not to say you should try to avoid cholesterol altogether. Your body needs cholesterol to function and uses it to build cell membranes and produce steroid hormones in sexual organs and adrenal glands. Scientists also think it may help in digestion. But not all cholesterol gets processed in beneficial ways.

On its own, the liver makes about 75% of the cholesterol in your body. The rest comes from the saturated fats that the liver converts to cholesterol and the cholesterol from the food you eat. The liver also makes molecules called VLDLs (very low-density lipoproteins) which carry cholesterol and triglycerides, fat-like substances that provide the body with energy, through the bloodstream. Once the VLDLs unload the triglycerides into the body's tissues, they become LDLs (low-density lipoproteins)—so-called "bad" cholesterol.

LDLs are composed of 60% to 80% cholesterol and travel throughout the circulatory system delivering cholesterol to cell walls, which are lined with LDL receptors. Normally these receptors will absorb the LDLs and use their cholesterol efficiently. But if your diet is loaded with cholesterol, there may not be enough receptors to absorb all the LDL. That's where the trouble begins.

With nowhere to go, the excess LDLs keep floating through the bloodstream until they are ultimately deposited on the walls of your arteries. And in a worst-case scenario, the arteries

become completely clogged.

That's where HDLs, or high-density lipoproteins, come in. HDLs are the so-called "good" cholesterol. The role of HDLs is less clear, but it's widely believed that HDL molecules are "good" because they work to remove excess LDLs from the lining of the blood vessels. The theory is that HDLs participate in a process called "reverse cholesterol transport" and transfer the

excess LDLs back to the liver where they are broken down.

The key questions here are what the ratios of LDLs and HDLs are to each other and your total cholesterol level. A quick way of determining your status is to divide your total cholesterol by your HDL, says Dr. Glenn Griffin, author of *Good Fat, Bad Fat: How to Lower Your Cholesterol & Beat the Odds of a Heart Attack*. If the ratio is 4.5 or lower, you're in good shape.



CHOLESTEROL CONTROL

FOODS TO EAT MORE OF . . .

	Saturated fat (grams)	Cholesterol (milligrams)
Beans and legumes, 1 cup	trace	0
Cottage cheese, 1 cup nonfat	0.3	0
Nonfat (skim) milk, 1 cup	0.3	trace
Light oat-bran bread, 1 slice	0.2	0
Poultry, 3 oz., light meat, no skin	1.0	70
Tuna, 3 oz., in water	0.3	50

. . . AND THOSE TO CUT DOWN ON

Butter, 1 tablespoon	7.0	30
Cream cheese, 1 oz.	6.0	30
Egg	1.7	275
Homogenized milk, 1 cup	5.0	33
Shrimp, 3 oz., boiled or broiled	0.5	160
Steak, marbled, 3 oz.	11.0	90

DATA: GOOD FAT, BAD FAT: HOW TO LOWER YOUR CHOLESTEROL & BEAT THE ODDS OF A HEART ATTACK. AUTHORS: GLEN C. GRIFFIN, M.D., AND WILLIAM P. CASTELLI, M.D., FISHER BOOKS, 1989

Griffin considers 3.5. For example, if your total cholesterol is 210 and HDL is 55, the ratio is 3.8. You can find out all this by getting a full lipoprotein profile. This is not the same as having your finger pricked by the portable analyzer at the office's health center or local mall. While these tests do accurately indicate total cholesterol level, they don't supply the ratios, which can be found only after waiting 12 to 14 hours.

Doctors recommend having a lipoprotein profile done every six to eight weeks, as the tests are difficult to analyze and so have a margin for error.

Generally, your best course is to raise your HDL cholesterol and lower your LDL, according to the Framingham Heart Study, a project that

has measured the risk of heart disease in thousands of Americans for 40 years. The National Cholesterol Education Program, under the auspices of the National Insti-

tutes of Health, says that a desirable LDL level is one below 130 mg/dl, while borderline is 130 to 160. If your LDL level is above 160, your doctor will likely suggest drug therapy. The readings for HDL levels are far lower, but any reading under 35 is considered dangerous while any reading over 50 mg/dl is considered healthy. Basically, the higher the HDL reading, the lower the risk.

It's easier to lower your LDL than to raise your HDL. The best way to raise HDL is to work out at least three times a week for 20 minutes at a time, says Dr. Kenneth Cooper, author of *Controlling Cholesterol*.

The most effective way to lower your LDL, apart from taking medication, is to eliminate saturated fats from your diet while increasing your consumption of monounsaturated and polyunsaturated fats, though polyunsaturates have been the source of some dispute lately. Some studies have shown that these fats not only reduce LDL levels but also reduce HDLs as well.

Polyunsaturated fats are found in fish, other seafood, and such vegetable oils as soybean, corn, sunflower, and safflower. Monounsaturated fats are found in olive, peanut, and rapeseed oils.

Saturated fats are found in meat and dairy products, specifically animal organs, fatty cuts of meat, and any product made with whole milk or cream. Palm and coconut oils also contain saturated fat.

Some high-fiber carbohydrates such as oat bran, brown rice, barley, and dried beans, seem to lower LDL levels without having an ill effect on HDLs.

Omega-3 fatty acids, which make up from 5% to 40% of the fat in fish, have long been hailed as effective in lowering excess cholesterol. Especially high levels of Omega-3 are present in oily, strong-smelling fish such as tuna, herring, sardines, and mackerel. A recent study at Vanderbilt University showed that 400-calorie doses of fish oil can also lower blood pressure.

But don't trade in your oat bran for fish oil, yet. "You'd have to eat over two pounds of tuna a day to get the amounts of Omega-3 we're talking about," says Dr. Howard Knapp, of Vanderbilt. "And this amount of oil will thin your blood, so we're not yet recommending it."

COSTLY CURES. If modifying your diet doesn't work, your doctor will probably prescribe one of the growing arsenal of drugs to combat high cholesterol. Bile-acid sequestrants, such as cholestyramine and colestipol, and nicotinic acid have been on the market the longest. All have been proven to reduce the risk of coronary heart disease by lowering LDL cholesterol 15% to 30%. Lovastatin is a relatively new drug that lowers LDL levels by 25% to 45%, but its long-term effects haven't been established. Gemfibrozil lowers LDL by 5% to 15% in some patients, but raises it in others. Probucol lowers LDL by 10% to 15% but may also lower HDL cholesterol by up to 25%.

Clearly, you'll have to do more than give up fast food and play golf once a week if you want to stave off cardiovascular disease. But if keeping your arteries clean helps you avoid heart trouble or surgery later on in life, you'll be glad you did. *Laura Zinn*



Smart Money

YOUNG FUNDS WITH AN EYE ON 1992

Europe is hot. In 1992, the European Community will relax age-old trade barriers among its 12-member nations. With protectionism giving way to free trade, European companies are scrambling for position to grab market share in the new order of things. As a result, a wave of American-style takeovers and leveraged buyouts has hit Europe.

One way for American investors to get in on the action is to buy shares of a U.S. mutual fund that invests in European stocks. "Double-digit performance growth is achievable in the next six to nine months," says Rory Powe, the London-based manager of MIM Britannia. Powe manages a no-load fund, called the Financial Strategic European Portfolio, for Denver-based Financial Programs.

WHAT'S BREWING. Several industries are poised to benefit from the lowering of barriers. For centuries, Germany's purity law has discouraged the importation of most beers from other countries, for example. As this restriction is eased (and assuming Germans develop a taste for, say, British beer), more European brewers will enter the German market. Such British giants as Allied Lyons and Bass should benefit, says Penny Dobkin, manager of Fidelity Europe, a load fund with a 2% initial fee and 1% redemption fee.

Other 1992 plays: Dobkin likes telecommunications giants such as France's Alcatel and Italy's CRT. These companies will benefit as European governments open contract bidding up to foreigners. MIM Britannia's Powe thinks 1992 will be a boon for companies in non-EC countries that have aggressively built up their EC presence, such as Sweden's Volvo and Switzerland's Brown Boveri, an electrical engineering company.

The funds are all new: The oldest is GT Europe, which was established in mid-1985. And they're small, too: The smallest, Financial Strategies, has only \$5.4 million in assets; the largest is Merrill Lynch's Eurofund, with \$221 million. Most of the funds are more than 95% invested in equities, yet each is concentrated in different countries. GT Europe, for example, is heavily invested in Spain and France, while Fidelity Europe likes the Netherlands, Germany, and Spain.

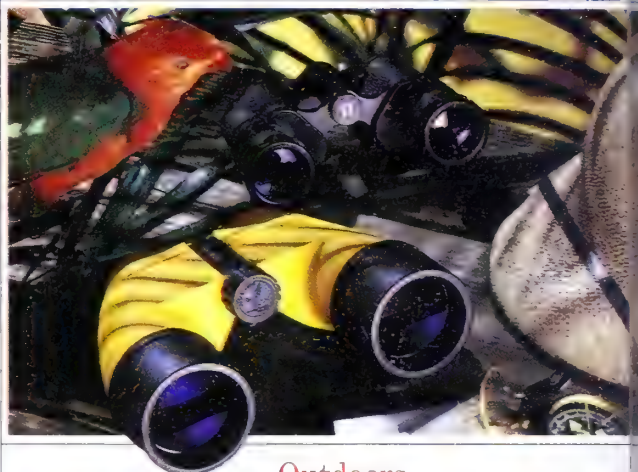
So far, the largest European equity mutual funds have not outperformed the U.S. stock market. And because gains in European stocks are earned in European currencies, the strength of the dollar is eroding some of the profits to U.S. investors. But if you want to bet on 1992, a European mutual fund is a good middle ground between a single country fund and a global fund. *Leah Nathans*

HOW THE EUROPEAN FUNDS HAVE FARED

	Total return (percent)		
	1987	1988	1989
FIDELITY EUROPE	10.58%	5.84%	14.90%
FINANCIAL STRATEGIC EUROPEAN	6.15	10.60	-4.55
G.T. EUROPE GROWTH	12.86	11.11	6.64
MERRILL LYNCH EUROFUND B	3.41	3.98	N/A
S&P 500	14.50	16.51	5.22

*Through May 5

DATA: MORNINGSTAR INC.



Outdoors

THESE BINOCULARS AREN'T JUST FOR THE BIRDS

Binoculars used to be either real clunkers that could almost double as free weights or dainty opera glasses. But improved optics have brought specialized, sleeker, and more powerful options into view.

Binoculars are identified by number combinations such as 6x30, 7x35, etc. The first number represents the power of magnification, or how many times closer an object seems. The second indicates the diameter, in millimeters, of the front objective lens. That lens determines how much light the binocular gathers. Larger diameters mean more light, but more weight, too.

VERSATILE. Swarovski, a famous maker of Austrian crystal, specializes in marine and hunting binoculars. Its 7x50 SL rubber-encased marine model (\$755) is waterproof and buoyant, and its large objective lens works well in low light. Swarovski's compact B 7x30 SLC model (\$530) is good for all-around use. The "B" indicates that the binoculars are suitable for eyeglass wearers, who turn back the rubber eyecups to get closer to the lens.

For bird-watching, Peter Dunne at the New Jersey Audubon Society likes West German 7x42 Zeiss binoculars (\$1,030). "Many birders want 10 power, but lower magnifi-

cation gives a broader field of view," says Dunne. Zeiss offers the tiny yet powerful 10x25 Bs (\$480).

Other elite binoculars made by Leitz, known for Leica cameras. Minox, Pentax, and Bausch & Lomb carry a broad range of product lines. Prices start around \$100 but can go up to \$1,000. Some offer zoom and wide-angle binoculars, but these aren't for purists. Says Lloyd Malsin, owner of New York retailer Clairmont-Nichols: "They're just another mechanism to break, and they limit the field of view." As with zoom lenses for cameras, there's always a trade-off between versatility and performance. *Suzanne Wood*

Worth Noting

■ **STUDY GUIDE.** *Management Study Abroad* details over 800 management programs offered through universities and colleges worldwide (\$18.95 from the Institute of International Education, 212 984-5412).

■ **RUBLE MACHINES.** The first automated teller machines (ATMs) in Moscow are up and running, says American Express. The ATMs dispense Russian rubles and American Travelers Cheques in dollars.

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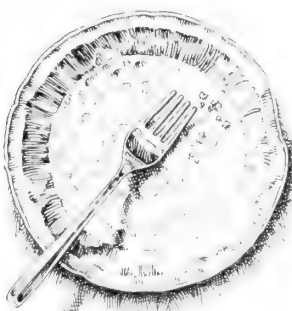
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Tropical Forest Project, World Resources Institute, 1735 New York Avenue, N.W. Washington, D.C. 20006/Prepared by Richardson, Myers & Donofrio, Inc.



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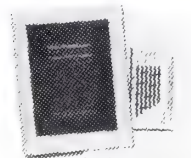
Company	Pretax Income*	Net Worth	Sales Price
MT-14	\$ 473	\$1,507	\$ 7,950
LE-35	46	644	3,000
PR-22	3,200	8,400	42,900
GG-07	1,525	5,453	18,000
UE-54	175	633	3,350
DE-37	44	264	12,287

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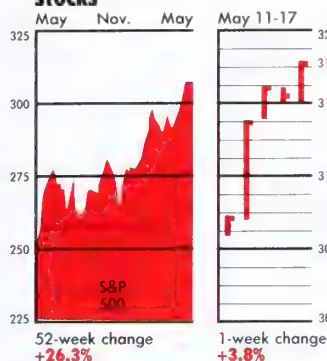
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LARGEST BANKS RECEIVE BILLIONS
OF DOLLARS FROM ONE
COMPUTER COMPANY. TANDEM.

Investment Figures of the Week

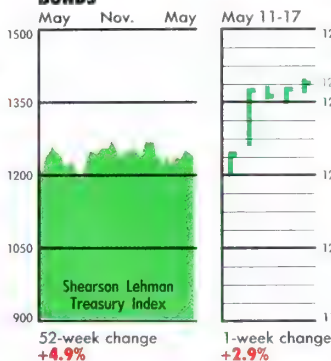
SENTARY

ant week for the financial
i. Stocks rose to their high-
ls since October, 1987, on
ngth of cheery economic
On May 12 the market en-
s greatest one-day ad-
n a year—a 57-point jump
ow—after word that April
er prices had risen less
pected. Equities and bonds
so propelled by expecta-
a modest gain in consum-
s. And the dollar rose af-
s of a narrowing of the
eficit.

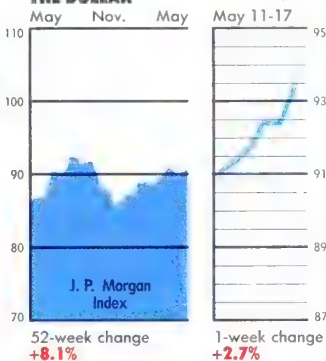
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	% change Week	52-week
ONES INDUSTRIALS	2462.4	3.7	26.2
OMPANIES (Russell 1000)	167.9	6.1	25.8
OMPANIES (Russell 2000)	168.3	1.6	20.3
OMPANIES (Russell 3000)	180.2	3.4	25.3

GN STOCKS

	Latest	% change (local currency) Week	52-week
N (FINANCIAL TIMES 100)	2155.8	1.8	21.3
(NIKKEI INDEX)	33,992.5	0.0	22.4
TO (TSE COMPOSITE)	3669.5	2.6	15.4

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.5%	8.8%	6.4%
30-YEAR TREASURY BOND YIELD	8.8%	9.1%	9.3%
S&P 500 DIVIDEND YIELD	3.3%	3.3%	3.7%
S&P 500 PRICE/EARNINGS RATIO	12.4	12.0	13.4

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	290.2	288.4	Positive
Stocks above 26-week moving average	68.3%	64.1%	Neutral
Speculative sentiment: Put/call ratio	0.22	0.24	Negative
Insider sentiment: Vickers sell/buy ratio	1.58	1.47	Positive

INDUSTRY GROUPS

WEEK LEADERS

	% change 4-week	52-week
IRE TIME	15.6	17.4
MUNICATIONS EQUIPMENT	14.5	1.9
ELS AND MOTELS	14.3	30.4
ETICS	13.3	19.2
NGS AND LOANS	13.2	50.2

WEEK LAGGARDS

	% change 4-week	52-week
ONAL LOANS	-10.9	4.0
UFACTURED HOUSING	-6.3	28.4
AL AND GLASS CONTAINERS	-4.4	18.3
L	-3.9	17.1
O MINING	-3.7	-2.9

Strongest stock in group

	% change 4-week	52-week	Price
OUTBOARD MARINE	31.2	29.7	41½
NORTHERN TELECOM	17.9	-2.8	17¼
HILTON HOTELS	26.2	63.2	71⅞
AVON	62.6	70.4	40¼
GOLDEN WEST FINANCIAL	23.8	79.3	45½

Weakest stock in group

	% change 4-week	52-week	Price
HOUSEHOLD INTERNATIONAL	-17.5	-3.3	51⅞
SKYLINE	-11.9	25.0	17½
BALL	-4.5	-4.9	26⅞
INLAND STEEL	-8.8	17.8	38⅞
PLACER DOME	-5.6	0.0	12⅞

BRIDGE INFORMATION SYSTEMS INC.

MUTUAL FUNDS

ERS

Week total return	%
ERMAN DEAN	12.2
ENTIETH CENTURY GIFTRUST INVESTORS	11.5
ILITY SELECT TELECOMMUNICATIONS	9.3

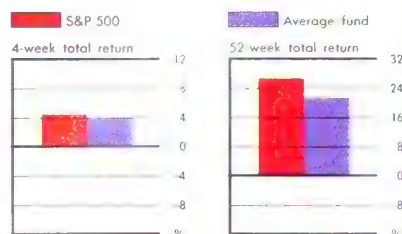
Week total return	%
EFMANN	65.9
ANCIAL STRATEGIC HEALTH SCIENCES	47.2
DDER CAPITAL GROWTH	47.2

LAGGARDS

Four-week total return	%
STRATEGIC INVESTMENTS	-8.5
FINANCIAL STRATEGIC GOLD	-7.4
STRATEGIC GOLD/MINERALS	-7.1

52-week total return	%
STRATEGIC GOLD/MINERALS	-28.1
SLH PRECIOUS METALS & MINERALS	-13.2
STRATEGIC INVESTMENTS	-12.5

MORNINGSTAR INC.



RELATIVE PORTFOLIOS

amounts
ent the present
of \$10,000
ed one year
each portfolio

ages indicate
y total returns



DATA RESOURCES INC.

on this page are as of market close Wednesday, May 17, 1989, unless otherwise indicated.
groups include S&P 500 companies only; performance and share prices are as of market close

May 16. Mutual fund returns are as of May 12. Relative portfolios are valued as of May 16. A more
detailed explanation of this page is available on request.

WHY LET GORBACHEV HOG THE INITIATIVE?

Mikhail S. Gorbachev has given James A. Baker III, on his first trip to Moscow as Secretary of State, a lesson in how to mobilize political support for a foreign-policy agenda. The Soviet leader grabbed headlines by announcing that he will remove 500 short-range nuclear warheads from Central Europe. At the same time, he handed Baker an impressive list of cutbacks, including 1 million troops and 40,000 tanks, that the Warsaw Pact proposes as part of a deal with NATO to reduce conventional forces. Absent Western initiatives, Gorbachev is shaping political opinion by offering made-in-Moscow designs for détente.

In arms control and other areas, President George Bush needs to make clear what his goals are and muster support for them—or risk letting Gorbachev take control of the agenda of superpower relations. In particular, he is almost certain to face rising demands at home for cuts in the 339,000 American troops and their 281,000 dependents in Europe. It is vital that such a pullback be carried out within the framework of a treaty to reduce the Warsaw Pact's conventional forces even more than those of NATO. Gorbachev has agreed, in principle, to such "asymmetrical" reductions, but the Bush Administration must push harder than it has up to now for a NATO consensus on how to approach such negotiations. The place to do this is at NATO's 40th anniversary meeting this month. Otherwise, momentum will grow within the U.S. to withdraw troops unilaterally.

The sources of such pressure are obvious. According to polls, Americans believe that the changes under way in the Soviet Union have diminished the threat of Russian aggression. Budget-cutters, in turn, increasingly see the \$305 billion defense budget, already down 12% in real terms since 1986, as the likeliest candidate for further savings. And many Americans feel that prosperous Europeans should take over a bigger share of the NATO defense effort.

Fortunately, Gorbachev badly needs to reduce the drain of military spending on the stagnant Soviet economy. That creates an unusual opportunity for reversing the U.S.-Soviet arms spiral. But if Bush merely reacts to Gorbachev's offers, the U.S. and its allies are likely to gain less in security than if Bush actively shapes the arms-cutting process.

DON'T USE COPYRIGHT TO SHACKLE SOFTWARE

Later this year, U.S. courts will take up three lawsuits whose outcome will determine, in large part, the direction America's computer software industry takes. What's in question is "look and feel," and that's important: The three plaintiffs, Lotus Development, Ashton-Tate, and Apple Computer, want to protect under copyright law the appearance and functionality of their software products.

It would be destructive if the courts award the plaintiffs

broad copyright protection. Copyright law simply doesn't work for software: The market is a far better mechanism for rewarding and protecting innovation.

The software industry is dynamic. Computers are powerful and customers' needs complex. Software has kept up. For it to do so, innovators must have free access to existing technology. That includes such standard visual-program features as pull-down menus, graphic symbols, and even certain keystroke sequences. That's how the most successful of today's programs were written: Developers borrowed from the past, using accepted technological devices.

That doesn't mean programmers should be able to copy software code or duplicate a program's appearance from start to finish. But copyright law, which governs the expression of an idea rather than the idea itself, wasn't meant to protect the many functional features that together comprise that appearance. The plaintiffs in this year's "look and feel" cases would have the courts do just that.

Software companies don't have to twist the law to protect their ideas. There's a better way: Keep inventing better products. The marketplace can be the best protector of

HOW BUSINESS SHOULD ACT UNDER FIRE

Since the 1960s, courses on corporate responsibility have been standard fare at the nation's business schools. Traditionally, such courses are poorly attended and not very stimulating. Dreaming of million-dollar Wall Street salaries, the typical student saved most of his or her energies for finance courses. But now something new seems to be going on. There is evidence of a high degree of public cynicism about corporate ethics and a strong willingness to take action to change company behavior (page 29). Corporations are being held accountable for their actions by consumers, shareholders, and activists in ways that thrust corporate accountability into the spotlight once more.

Did Exxon Corp. do enough to clean up the Valdez spill? Should companies that put tropical oils in cookies and cereals voluntarily take them out to lower their products' cholesterol levels? In previous years, such complaints might have gone to a federal regulatory agency. Now they're landing on company doorsteps. The American Nurses' Association, angered by how the NBC show *Nightingales* showed student nurses in their underwear, didn't bombard the Federal Communications Commission. Instead, it pressured 15 companies that sponsored the show. Two big ones, Sears and Chrysler, pulled out quickly. And many of the nation's food processors have stopped using tropical oils.

Consumer groups have flexed their muscles by backing Proposition 103 in California to roll back insurance rates. Protests linger against Exxon and against companies that kill animals in tests and overly develop already crowded cities. Does this portend a new backlash against business? Not yet, perhaps. But the pressures are heading in a new direction: at the companies themselves. If management doesn't deal with these demands, someone will probably do for them with onerous legislative prescriptions.

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بتبادل العملات الاجنبية.

فقد أظهر أعضاء اللجنة

تجاوبا وتقهما باهتمامات

الادارة العليا.“

BusinessWeek

NE 5, 1989

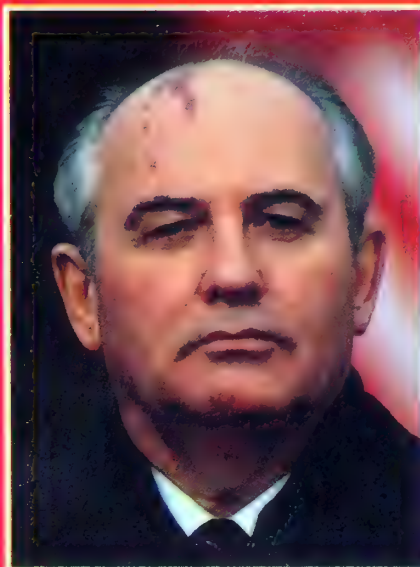
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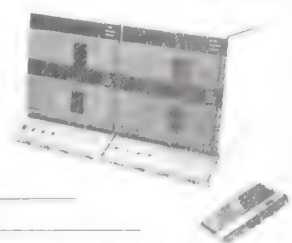
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COMMUNISM IN TURMOIL



Special Report

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As China's and Russia's economies decay, so have their political systems. The tumult in China and the Soviet experiment in *perestroika* mark the beginning of the end for a system that has outlived its promise

China

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The students and workers keeping vigil in Tiananmen Square are only the most visible sign of China's upheaval, as the country embarks on the road toward colossal political and economic reforms

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Accustomed to upheavals, foreign investors are wary, but they aren't running

Soviet Union

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Despite attempts to crack down on corruption, the Soviet black market is stronger than ever

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Gorbachev may team up with these neighbors because he needs their help to develop the Soviet Far East

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Poland and Hungary have become Gorbachev's laboratories for market economics and democratization. But while both countries are looking East for inspiration, they're looking West for a safety net

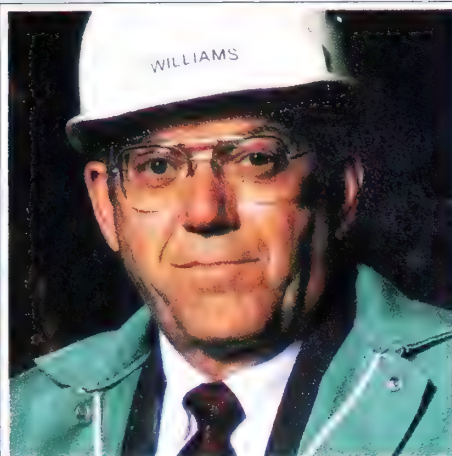
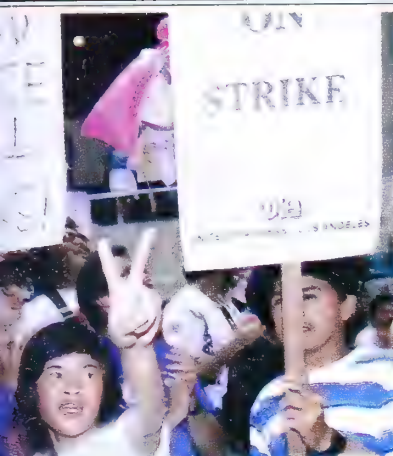
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Photo-journalist Ed Kashi captures some strangely familiar scenes in this pictorial essay

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In the U. S. and Europe, the desire to reduce tensions is putting pressure on the White House to respond more actively to Gorbachev's initiatives. But so far the President has been slow to grasp the opportunity



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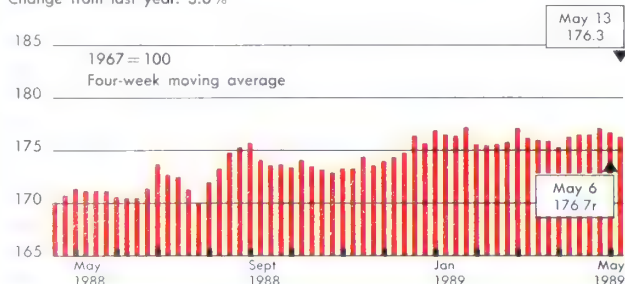
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BusinessWeek Index

PRODUCTION

Change from last week: -0.2%
Change from last year: 3.0%

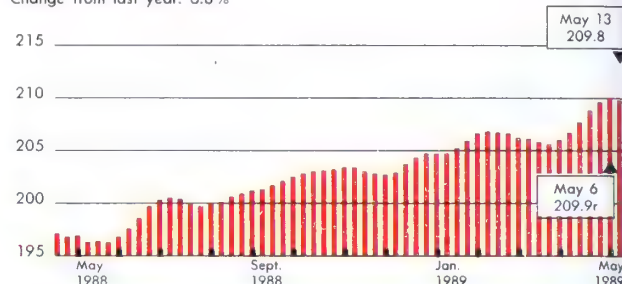


The production index declined for the week ended May 13. The index continues to show little movement. It remains at about the same level now as it was in the beginning of the year. On a seasonally adjusted basis, output of trucks, electric power, crude-oil refining, steel, and paper decreased. Production of lumber, autos, coal, paperboard, and rail-freight traffic increased. Before calculation of the four-week moving average, the index dropped to 175 from 176.1 in the previous week.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: 6.8%



The leading index edged down slightly for the week ended May 13, its first drop in six weeks. Lower stock prices, a sharp gain in the number of business failures, and slower growth in M2 contributed to the overall decline. However, bond yields were lower, and the growth rates for real estate loans and materials prices accelerated for the week. Prior to calculation of the four-week moving average, the index was unchanged at 209.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/20) thous. of net tons	1,971	1,955 #	-1.7
AUTOS (5/20) units	163,406	159,730r #	-4.8
TRUCKS (5/20) units	88,456	88,046r #	-2.9
ELECTRIC POWER (5/13) millions of kilowatt-hours	49,583	50,803 #	2.2
CRUDE-OIL REFINING (5/20) thous. of bbl./day	13,414	13,133r #	0.1
COAL (5/13) thous. of net tons	19,011 #	18,885	7.2
PAPERBOARD (5/13) thous. of tons	737.2 #	712.6r	2.6
PAPER (5/13) thous. of tons	749.2 #	766.0r	4.1
LUMBER (5/13) millions of ft.	476.1 #	458.4	-7.1
RAIL FREIGHT (5/13) billions of ton-miles	19.7 #	19.7	1.5

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/24)	143	139	126
GERMAN MARK (5/24)	2.01	1.97	1.71
BRITISH POUND (5/24)	1.57	1.61	1.86
FRENCH FRANC (5/24)	6.81	6.68	5.76
CANADIAN DOLLAR (5/24)	1.20	1.19	1.24
SWISS FRANC (5/24)	1.79	1.76	1.43
MEXICAN PESO (5/24) ³	2,465	2,458	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/24) \$/troy oz.	361.500	371.900	-20.4
STEEL SCRAP (5/23) # 1 heavy, \$/ton	114.50	115.50	1.3
FOODSTUFFS (5/22) index, 1967 = 100	228.5	227.6	-1.1
COPPER (5/24) \$/lb.	124.7	132.1	16.3
ALUMINUM (5/20) \$/lb.	100.8	101.0	-17.0
WHEAT (5/20) # 2 hard, \$/bu.	4.54	4.62	38.0
COTTON (5/20) strict low midling 1-1/16 in., \$/lb.	62.79	63.08	0.2

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/19) S&P 500	317.63	307.56	24.5
CORPORATE BOND YIELD, Aaa (5/19)	9.54%	9.69%	-4.0
INDUSTRIAL MATERIALS PRICES (5/19)	106.2	105.4	7.1
BUSINESS FAILURES (5/12)	231	214	-20.1
REAL ESTATE LOANS (5/10) billions	\$322.2	\$321.9r	13.3
MONEY SUPPLY, M2 (5/8) billions	\$3,071.4	\$3,075.5r	2.2
INITIAL CLAIMS, UNEMPLOYMENT (5/6) thous.	310	290	0.1

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980 = 100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
ORDERS FOR DURABLE GOODS: MFG. (Apr.) billions	\$129.1	\$125.4	10.0
BUDGET SURPLUS OR DEFICIT (-) (Apr.) millions	\$41,446	-\$35,779	NA
CONSUMER PRICE INDEX (Apr.)	123.1	122.3	5.0
REAL GROSS WEEKLY PAY (Apr.)	\$167.66	\$165.61	-1.0

Sources: Commerce Dept., Treasury Dept., BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/8)	\$772.9	\$781.6r	0.0
BANKS' BUSINESS LOANS (5/10)	316.9	317.9r	4.0
FREE RESERVES (5/17)	427	667r	-18.0
NONFINANCIAL COMMERCIAL PAPER (5/10)	122.8	121.5	30.0

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (5/23)	9.73%	9.76%	7.14%
PRIME (5/24)	11.50	11.50	9.00
COMMERCIAL PAPER 3-MONTH (5/23)	9.21	9.37	7.24
CERTIFICATES OF DEPOSIT 3-MONTH (5/24)	9.50	9.55	7.28
EURODOLLAR 3-MONTH (5/17)	9.56	9.85	7.40

Sources: Federal Reserve Board, First Boston

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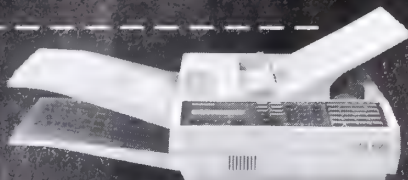
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CRACK DOWN ON OVERPAID BOSSES

How ironic it is that "free enterprise," which our captains of industry are so quick to invoke when it suits their purposes, plays so little a role in the setting of their own compensation ("Is the boss getting paid too much?" Cover Story, May 1). Is it any wonder that corporate executives' pay increases routinely outstrip everybody else's, when you consider that, as a group, they sit on each other's boards and set each other's salaries, bonuses, and other perks? It is as if ball players and rock stars (which CEOs love to compare themselves to when justifying their pay levels) had to bargain only with other groups of ball players and rock stars, instead of with the tighter-fisted owners of the teams and record companies. The analogy further breaks down when you consider that ball players and rock stars do not have long-term job security provided by golden parachutes, stock options, and executive insurance policies to fall back on when their pitching arms or voices give out.

Consultants do not get referrals to other companies by recommending to the CEOs who hire them that their companies are already paying them plenty and would be better advised to put the additional money into clerical or middle-management salaries. Nor do internal staff reap bonuses and promotions by proffering such advice.

Despite the occasional, well-publicized move by an executive from one company to another company, the typical CEO is promoted from within. Is there anyone who really believes that a young executive vice-president earning, say, \$300,000 per year would turn down the opportunity to become president if it only paid \$450,000 or \$500,000, instead of paying \$1 million?

CEOs are good at asking hard ques-

tions about pay levels for the lower ranks. Many a human resources director has spent long hours being grilled about whether the corporate salary budget for the rank and file needs to be 6% or on 5¼%. Similar questions need to be asked about executive-pay proposals, and it is the responsibility of the board of directors to ask them. Current board members seem to be inhibited about carrying out this responsibility, because asking hard questions violates the unspoken rules of the "club." It is time to broaden club membership and to begin electing to our boards directors who will take the fiduciary duty to shareholders more seriously.

Steven Bavar
Rowayton, Conn.

Is the boss getting paid too much? May we should ask: "Are the shareholders being raped?" These outrageous compensation packages give capitalism a bad name. The directors who permit this mayhem with shareholder money should be sued. How can an annual remuneration of tens of millions of dollars be justified? And the most glaring joke of all? The leader of this merry pack is the chief of Mickey Mouse.

Donald Duck!

Bronislaw T. Chrobak
Summit, N.J.

The question asked on the cover, "Are they worth it?" is easy to answer. No one is worth an average of \$19,280,000 a year that these top 10 CEOs command. For that matter, it is hard to say that the 708 executives surveyed who averaged \$2 million last year are worth that amount. To put this in perspective we only have to read further to see that America's top teacher [the Teacher of the Year] commands \$34,800 a year.

Is it any wonder that high school graduates have trouble getting manufacturing jobs that require basic numeracy and literacy skills? It's about time the business community wakes up and



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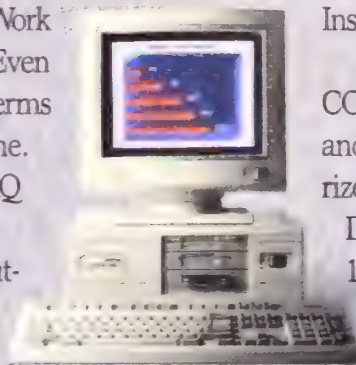
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Readers Report

the most practical and economical ways of providing the necessary habitat for numerous species.

We must see the necessity of eventually harvesting these and other resources to the benefit of the overall ecosystem. Surely we can put up with some temporary eye irritation by understanding the long-term benefits of well-planned, reasonably sized clear-cuts.

Charles A. Sauer
Regional Director
The Ruffed Grouse Society
Granville, Ohio

THE DANGERS OF CUTTING DEPOSIT INSURANCE

Our editorial "Insure depositors, not bad risks" (Editorials, May 8) floats a destructive idea of lowering "the deposit insurance ceiling from \$100,000 per household to, say, \$50,000 per household." Why is this destructive? Because deposits, for better or for worse, flow to existing levels of deposit insurance; and because the larger banks of this nation operate under no effective deposit-insurance discipline because they are too big to fail. Your readers are well-acquainted with the billion-dollar rescues of Continental Illinois as well as the Texas trio of First Republic, First City, and MCorp. In such rescues, all deposits are made whole [including those that are in overseas branches]. No deposits are at risk. Against this well-established policy backdrop, lowering existing levels of deposit insurance would ensure the outflow of funds from the thousands of too-small-to-save financial institutions to the relative handful of too-big-to-fail institutions. Funds thus would flow to those very institutions that pose the greatest systemic risk to the existing system of general deposit insurance.

It is worth noting that the larger institutions pay no special insurance premium for their immortality. It is also worth noting that not only does the Middle Eastern depositor with \$10 million in the London branch of a large U.S. money-center bank enjoy de facto 100% FDIC insurance coverage that the \$200,000 Iowa farm depositor doesn't enjoy at his local bank, but also that the money-center bank pays no FDIC insurance assessment on this foreign deposit.

Kenneth A. Guenther
Executive Vice-President
Independent Bankers Association
Washington

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Books

TERRITORY OF LIES

By Wolf Blitzer

Harper & Row • 336pp • \$22.50

THE SPY WHO LOVED ISRAEL —AND PAID FOR IT

Jonathan Jay Pollard is many people's worst nightmare. For American Jews, he lends ammunition to the charge that dual loyalty to the U.S. and Israel is impossible. For American intelligence agencies, he is a reminder that their most treasured secrets are vulnerable. And for Israel's vaunted security services, he is proof that they can botch a job with the worst of them.

Pollard, now serving a life sentence at the maximum-security federal prison in Marion, Ill., was a civilian analyst for the Office of Naval Intelligence, a Jew obsessed with Israel since childhood, and a man with grandiose fantasies of heroism. As told in this compelling book by Wolf Blitzer, Washington bureau chief for the English-language *Jerusalem Post*, Pollard's three sides came together with disastrous results.

Territory of Lies has all the elements of a thriller except the suspense. Pollard was working in an antiterrorism unit of Naval Intelligence in 1984 when he decided to stop thinking about what he called his "racial obligation" to Israel and do something about it. At a meeting set up by a friend, Pollard announced to Israeli Air Force Colonel Aviem Sella his intention of becoming a spy.

Fearing plants, intelligence agents are usually wary of volunteers. Israel's official agency—the Mossad, with close ties to the Central Intelligence Agency—wanted no part of running a mole in a U.S. security service. LAKAM, a shadowy unit of the Defense Ministry, was intrigued but first asked Pollard to prove he could supply information that was not coming through ordinary intelligence-sharing. Pollard passed with hon-

ors. But LAKAM head Rafael Eitan distrusted a spy motivated by ideology alone. To keep Pollard hooked, he showered him with cash, adding up to tens of thousands of dollars over 18 months.

For Israel to run an agent within U.S. military intelligence was rash. Eitan, an experienced spy master, compounded the risk: He gave Pollard no training and even failed to provide him with an escape route. Pollard's material, mostly satellite photos, was so good that the Israelis demanded more and more. Eitan's greed was Pollard's undoing.

When Pollard's boss at Naval Intelligence realized the analyst was doing research unrelated to his job, counterintelligence agents questioned Pollard at home but didn't arrest him immediately. He and his wife, Anne, fled to the Israeli embassy, where he was chucked out into the FBI's waiting arms. Convinced he had been abandoned by Israel, which promised "full cooperation" with the investigation, Pollard pleaded guilty and told prosecutors all he knew. He implicated a number of Israelis and confirmed Washington's fears that Jerusalem had not cooperated fully at all.

While awaiting sentencing, Pollard gave Blitzer two interviews that form

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heart of this book. hough the Justice t. approved the etings, it later ar- d that Pollard had ated his plea bar- 1 agreement, which uld have reduced his tence, by talking. zzer thinks Justice d him to set a trap Pollard but holds lard responsible for ing into it.

Despite some awk- rd writing, Blitzer is a good tale. But real value of *Terri- y of Lies* is in the l section, where he s to figure out how Pollard affair hap-

ped and how much harm was done. ough the U.S.-Israel relationship re- ns strong, it was in many ways per- ntly damaged. Friendly countries and do spy on each other—but with- irm limits that the Israelis exceeded miles. What intelligence agencies st fear losing is the secret of how ir data are collected. By giving Israel rmation that had not been rubbed” to eliminate tips about the



HEADED FOR JAIL: WAS POLLARD'S SENTENCE OF LIFE IMPRISONMENT TOO HARSH?

source, Pollard may have made the U.S. stingier in sharing data with Israel.

One of the saddest consequences of the affair, as Blitzer notes, is the insecurity many Jews in high U.S. government positions have felt since Pollard's arrest. Security clearance for officials with close relatives in Israel now comes under the scrutiny once reserved for those with family in the Soviet Union.

But did Pollard get life because of

anti-Semitic or anti-Israel sentiment? Blitzer rejects the idea, though he finds the sentence excessive. He obtained a sanitized version of a damage assessment memo written by then Defense Secretary Caspar W. Weinberger. Blitzer hints he saw the original, too. He concludes: "Pollard did indeed damage U.S. national security.... Even Pollard's supporters would recognize the damage if the full memo were released."

Finally, Blitzer rejects Israel's contention that Pollard was run by a "rogue" operation. Whatever the Israeli government says, the information Pollard was providing was too good and too abundant to have escaped the attention of top officials in Israel's defense forces and government. If the higher-ups didn't know, it's only because they were working very hard not to find out.

BY STEPHEN H. WILDSTROM
Senior News Editor Wildstrom follows intelligence matters in Washington.

DADDY!

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BusinessWeek



HIGHER 'SIN' TAXES: A LOW BLOW TO THE POOR

BY GARY S. BECKER



Some economists are calling for greater taxation of smoking, drinking, and gambling to help government deficits. But taxes on lotteries and cigarettes—expenditures favored by the poor—are already excessive

Prompted by the large federal budget deficit and the financial difficulties faced by state governments, some economists have called for greater taxation of "sin"—smoking, drinking, and gambling. But I believe that the taxes on lotteries and cigarettes are already excessive and that only the tax rate on beer is clearly too low.

Lotteries have replaced "numbers" as the favorite method of gambling among the poor. There are 33 states with lotteries, and many others are discussing whether to introduce them. But only about half the amount wagered on lottery tickets is returned as prizes. From 30% to 45% of the revenue from lotteries, depending on the state, is tax. The rest goes for administrative expenses and for the cost of collecting the tax revenue. Why should states tax so heavily the pleasures poor bettors get from dreaming of a better life with less drudgery?

It is impossible to justify on equity grounds the heavy taxation of lotteries. A study of lotteries by Professors Charles Clotfelter and Philip Cook for the National Bureau of Economic Research shows that the poor bet a much larger share of their incomes. Yet, the authors also show that the typical low-income bettor does not spend much. Not many poor whites bet more than \$10 a week, although a much larger fraction of poor blacks do. People who bet modest sums hurt no one, and those who gamble a lot mainly harm themselves and their families.

SOCIAL PRICE? Inhalation of cigarette smoke does not cause auto accidents, absenteeism from work, or much other behavior that imposes large costs on society, although a big debate is raging about the harmful effects of passive smoking. And the taxes that account for about 30% of cigarette prices are regressive, since less educated and poorer people smoke much more than others. Perhaps smoking by teenagers should be curtailed if they are not capable of foreseeing the harmful consequences on their own health of their behavior, but why tax so heavily adult smokers who mainly harm themselves?

Excessive drinking does cause a large fraction of road deaths and much job absenteeism. The recent disastrous Exxon Valdez oil spill was allegedly partly the result of drinking by the ship's captain. Excise taxes account for a sizable 45% of liquor prices but only about 10% of wine and beer prices. The tax on beer seems low, for this is the alcoholic beverage favored by the drunk young people who cause many auto deaths.

However, heavy taxes on alcohol disproportionately penalize light drinkers

and people who confine their heavy drinking to situations where they are not a threat to others. For this reason, I believe severe punishments to drinkers who cause serious auto and other accidents, rather than very high taxes, should be used as the main deterrent to inappropriate drinking.

Even though the federal and many state governments are looking for additional revenue to cut their budget deficits, they have shied away from raising taxes on groups that offer strong political opposition. Companies often use their political clout to keep down the taxes on their products.

NO PRESSURE. In light of the importance of clout, it is easy to see why lotteries are highly taxed. Private companies do not run lotteries, so no company has much reason to lobby against the large slice of lottery revenues taken by states. Bettors are not well organized and do not spend enough to take an interest in the politics of lottery taxes.

The middle classes and the rich don't usually gamble through lotteries, but through stocks, bonds, futures, options, and other financial instruments. The low tax rates on financial transactions result partly from stock and bond markets' serving other purposes than the desire of the traders to gamble—raising capital, for instance. But surely a crucial reason is also that groups such as the New York Stock Exchange lobby hard to keep taxes down.

The tax rates on cigarettes, beer, and wine are lower than those on lotteries not because of lower public hostility to smoking and heavy drinking than to betting. Rather, there is well-organized opposition to smoking because of the enormous harm to smokers. And everyone knows drunks pose serious threats to the innocent.

These forces aligned against smoking and heavy drinking would have led to higher federal taxes to raise revenue and cut down these activities were it not for the political power of beer, wine, and liquor producers, cigarette companies, and tobacco growers. They advertise, turn voters out on key political issues, and their political action committees contribute heavily to campaigns at all levels. Tobacco growers are even able to get large subsidies while Congress debates higher taxes on cigarettes, and the federal tax on alcohol has hardly increased in 30 years despite the large rise in consumer prices.

Government budget deficits may well justify higher sales and excise taxes, but taxes on lotteries and smoking—expenditures favored by the poor—are too high compared with the taxes on other consumer activities. ■

GARY S. BECKER IS UNIVERSITY PROFESSOR OF ECONOMICS AND SOCIOLOGY AT THE UNIVERSITY OF CHICAGO

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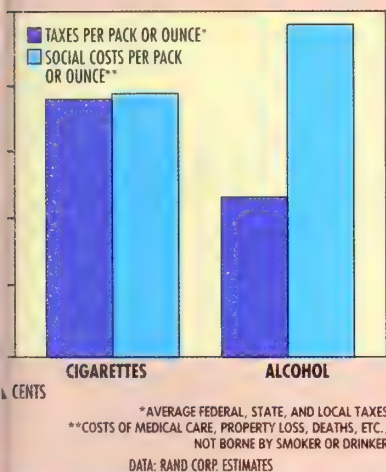
LINCOLN-MERCURY DIVISION  Buckle up—together we can save lives

BY GENE KORETZ

SMOKERS MAY BE KEEPING SOCIAL SECURITY HEALTHY . . .

One often-cited reason for raising the so-called sin taxes is that smoking and heavy drinking harms not only smokers and drinkers, but society as a whole (page 23). The costs include medical bills, property damage resulting from automobile accidents and fires, and lost output due to sickness and early death. In the case of cigarettes, the total costs to smokers and the public at large would run \$2.17 per pack, according to a 1985 study by

SMOKING AND DRINKING: TAXES VS. THE SOCIAL COST



the Office of Technology Assessment. A new Rand Corp. study authored by a team of researchers led by economist Willard G. Manning of the University of Michigan takes a different tack. Arguing that an efficient tax is one that reflects the costs imposed by individuals on others, the study seeks to distinguish the external costs of smoking and excessive drinking—those borne by society—from the internal costs borne by smokers and drinkers themselves. In this view, people are free to engage in lawful behavior, even if it harms them, as long as they pay its full costs.

The researchers' most controversial finding is that smokers come close to paying their own way at the current level of excise taxes—mainly because they don't live long enough to enjoy the Social Security and pension benefits they have paid for. To be sure, smokers incur a lot more expenses in terms of medical bills, sick leave, and fire damage to property than they pay for directly or

through insurance and taxes. But because their lives are a lot shorter than nonsmokers, they also wind up subsidizing the pension and Social Security benefits received by others. The bottom line is that that smoking's external costs, including illness and deaths from passive smoking suffered by family members, are almost fully covered by the current tax bite (chart).

By contrast, the Rand study concludes that taxes on alcohol cover only about half the costs that drinkers impose on the rest of society. One big reason is that in contrast to smokers, a significant number of heavy drinkers die young in automobile accidents before they have contributed much to pension funds. Others tend to retire early and thus pick up large disability and pension benefits. At the same time, one of the biggest external costs of heavy drinking is the value of innocent lives lost to drunk driving.

"If economic efficiency is the criterion for determining taxation," says Manning, "then taxes on alcohol—particularly on beer and wine whose alcohol content is taxed far less than that of distilled spirits—are clearly too low."

... BUT PRICIER SMOKES AND DRINKS MAY STILL MAKE ECONOMIC SENSE

Are there other economic criteria for raising cigarette taxes besides the external cost argument? And wouldn't raising alcohol taxes unfairly penalize light drinkers?

In their study, the Rand Corp. researchers point to the initial ignorance of many smokers of the risks they are incurring and the regret later expressed by many adult smokers. Rand Corp. researcher Emmett B. Keeler estimates, for example, that on average each pack of cigarettes reduces the life expectancy of smokers by more than two hours—a fact that's hardly appreciated by the 85% of smokers who begin smoking in their teens. Since most teenagers are sensitive to the disincentive effects of high tobacco taxes, a tax hike could be deemed "economically efficient" on the grounds that it might prevent many from starting to smoke in the first place—something they would have done if they were fully aware of the risks.

As for light drinkers, the Rand study concedes that they probably don't impose external costs on others. But it also points out that heavy drinking is highly concentrated among relatively few people. Indeed, three-fourths of adult drinkers consume less than the average of four drinks a day. Such light drinkers,

the researchers contend, would actually pay less in higher excise taxes than if similar revenues were sought through more broadly based levies such as payroll taxes. "It's the 10% of adult drinkers who consume two-thirds of the alcohol that's drunk that would wind up paying the tab," says Keeler.

THE MIGHTY DOLLAR WON'T WIDEN THE TRADE GAP FOR SOME TIME

Late last summer, economist Robert H. Parks of Moore & Schley began predicting that some surprising drops in the trade deficit lay ahead (BW—Sept. 12). He also advised his clients that "neither world central bank chiefs nor King Canute will be able to hold back the return of King Dollar" and that U.S. securities markets would rally sharply over the next 12 months.

So what does Parks see ahead now that his earlier predictions have apparently borne fruit? In four words, "more of the same." The trade deficit will continue to improve, he says, because the dollar is still undervalued in purchasing power terms, and because of the "reverse J-curve effect"—that is, a rising dollar's initial tendency to cut the dollar cost of imports. Lower import costs will also boost manufacturing profits and equity prices. And an improving trade balance and rising profits will add even more to the dollar's buoyancy.

"At some point," says Parks, "the rising dollar will cause the trade gap to widen again, but that's at least a year away. Meanwhile, all systems are go."

IS THE FED LIKELY TO EASE UP ON EASING UP?

Ironically, the very success of the Federal Reserve's efforts to slow the economy may prevent a major turn toward monetary ease, says economist Robert H. Chandross of Lloyds Bank in New York. That's because the bond and stock market rallies inspired by the slowdown and by expectations of further monetary easing are likely to cushion the downturn. Already, Chandross sees signs that falling mortgage rates are bolstering some housing markets, and he expects rising bond and equity prices to exert a significant wealth effect on consumer spending. "With the markets rallying, the Fed will be less worried about the slowdown degenerating into a recession," he says. ■



Two men in dark suits and ties stand in a modern office lobby with large windows. The man on the left has a mustache and is looking towards the camera. The man on the right is also smiling and looking towards the camera. In the background, a woman is seated at a desk with a computer monitor. The scene is brightly lit by natural light from the windows.

Allied & AT&T Computers: A Moving Story.

Chicago, Illinois February 23, 1989

Recently, Allied® Van Lines tied their corporate computer systems into one fast, efficient, distributed computer network. Allied's Chuck Werner tells AT&T's Frank Mastro how AT&T's Distributed Network solution saved money for Allied and improved agent service.

Frank: You guys are pretty tough customers.

Chuck: (Laughs) You bet! There were a lot of frustrated folks here; some managers had to use six terminals to get complete answers about billing, tariffs, etc. We'd seen the power of distributed networked computing when you linked Purchasing's AT&T 3B2 computers to Accounting's IBM host. We wanted more, and we wanted it fast.

Frank: Many companies are trying to manage multi-vendor systems and applications, but yours were particularly complicated.

Chuck: Believe it or not, we were running accounting on the IBM 3090, claims insurance on the Qantel, tariffs on the DEC PDP, and claims checking on the Wang.

Frank: None of the computers could talk to each other. People really needed six terminals to answer some questions.

Chuck: We had to have true distributed processing, and AT&T was the proven choice. You have a technical edge with the Information Systems Network. Because ISN allows transparent access to *all* our different systems, we could replace six terminals with one AT&T 605.

Frank: Now a claim or bill is just a hot key away.

Chuck: Plus ISN saved us money when

we moved to our new data center. We didn't have to rewrite applications; we just moved everything we already had, and plugged into the ISNs through voice wiring paths. No one believed it—true investment protection!

Frank: I'll never forget *that* weekend.

Chuck: We now respond to 95% of our agents' questions in three seconds. And we're seeing cost savings already. AT&T 605 terminals each cost less than six months' rent on the old IBM terminals. We'll save a half-million dollars in expenses this year alone.

Frank: Plus everything runs over AT&T fiber-optic cable and twisted-pair wiring in your new building, instead of coax; you saved there, too.

Chuck: Right. We're delighted distributed networking customers of AT&T. We've had 3B2 computers in the field for years, handling shipment registration and accounting for agents. Your solutions are elegant: that's why your RFP won this time, over five other vendors. You know how to make our agents happy, and when they're happy, we're happy.

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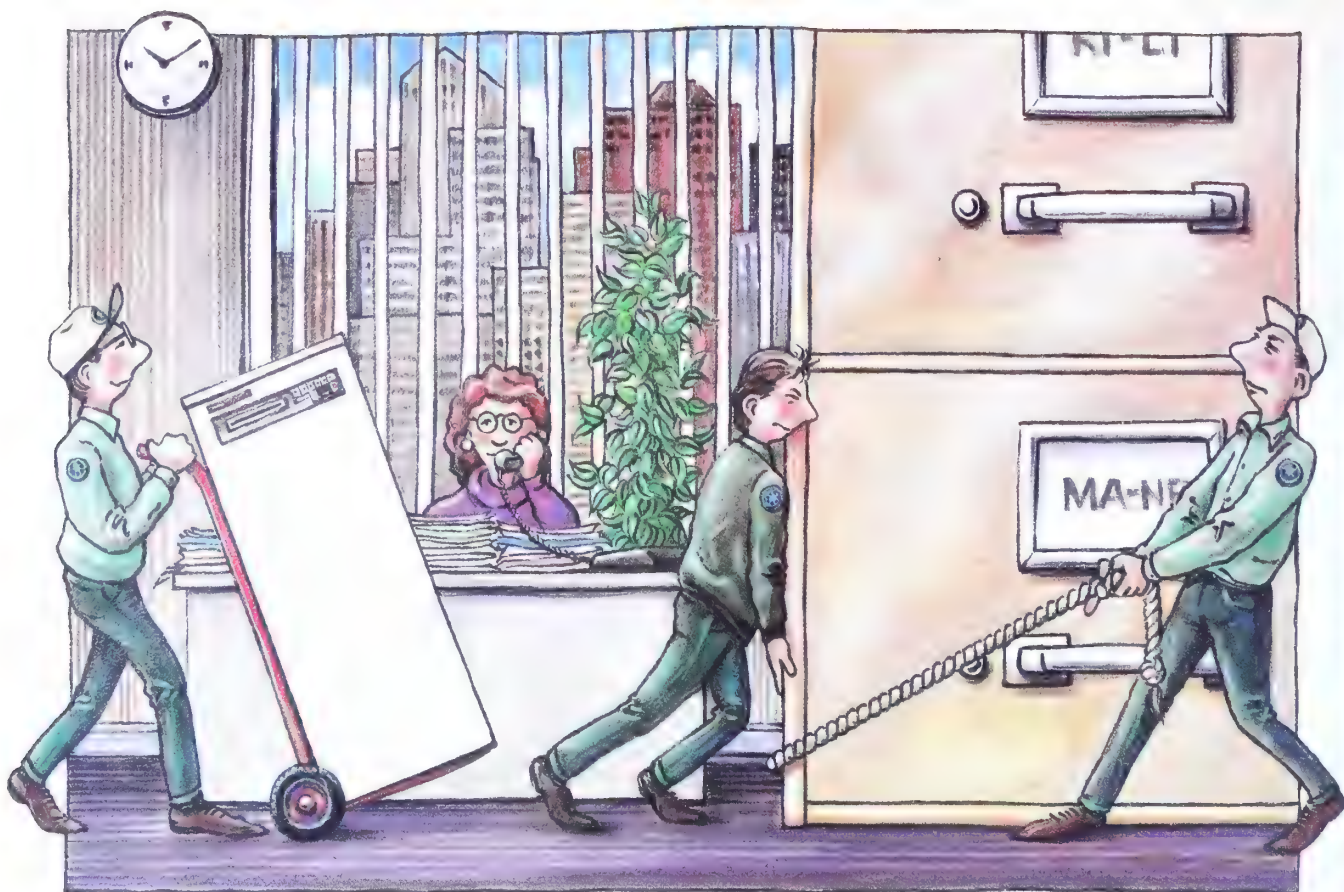
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THE FED SEEMS TO BE WRESTLING INFLATION INTO SUBMISSION

The Federal Reserve Board continues its lonely fight to keep the expansion on a noninflationary growth path. It's not getting any help from the Bush Administration, because fiscal policy remains gridlocked by the federal budget deficit.

To its credit, the Fed seems to be achieving a lot of what it wants. After a year of credit-tightening, the signs of a cooler economy that showed up in February and March were reinforced as the second quarter got under way. The latest evidence: Car sales in mid-May jumped to an annual rate of 6.8 million from 7.4 million earlier in the month. And worries about overtightening are receding: The April gain in durable-goods orders indicated continued health in manufacturing.

THE HEAT UNDER CONSUMER PRICES



True, inflation remains a thorny problem, but there are hints that it is not growing into the brier patch that the financial markets had feared. Service inflation is still hot, but inflation in goods prices shows signs of easing (chart).

The Administration even had some good news: The Treasury in April posted a record surplus that will likely lower the deficit

for fiscal 1989. Still, the good fortune may be fleeting: The 1990 budget will remain mired in red ink.

The dollar's unrelenting strength is the Fed's newest problem. The greenback has risen to its highest level in more than two years. Although the stronger currency is anti-inflationary, it also threatens to impede improvement in the trade deficit, especially on the export side, which is so important to the manufacturing sector.

With so much uncertainty still around, the Fed probably will keep monetary policy the way it is into the summer. The newly released minutes of the Fed's policy meeting in late March confirmed the money managers' return to a neutral stance. The conclusions of the mid-May meeting are likely to look the same. By summer, the Fed will have a good idea of how much the economy has slowed and how much of an inflation risk remains.

A SOFT LANDING—OR A CRASH?

Clear gains in containing inflation will be the key to bringing this expansion in for a "soft landing," rather than crashing into a recession. Only with inflation safely under wraps will the Fed ease policy, allowing the expansion to get its second wind.

For now, inflation signals are mixed. The consumer

price index jumped 0.7% in April, after average monthly gains had speeded up to 0.5% during the first quarter, from 0.3% during the fourth quarter. However, a 5.1% surge in energy prices—led by a record 11.4% advance for gasoline—accounted for most of the April gain. Excluding energy, the rise was only 0.2%.

In fact, food and energy account for virtually all the acceleration in prices during the past half year. The core rate of inflation—which excludes food and energy—has stayed steady during the past six months at a 4.5% annual rate, the same as in the previous half year.

For the rest of 1989, food and energy are likely to be moderating influences, now that the economy has absorbed the effects of last year's drought, and as the recent hike in crude-oil prices runs its course. Inflation in goods prices excluding food and energy should remain modest. That's where Fed tightening is hitting demand.

The outlook for inflation will depend largely on moves in the service sector. Prices of goods other than food and energy rose at a 3.4% annual rate during the past six months, down from 3.7% in the previous six months. But that accounts for only 26% of the CPI, while nonfood, non-energy services weigh in at 51%. Inflation there has not let up. It has been running at a 5.1% pace during the past half year, up slightly from 5% in the six months before that.

The outlook for inflation in services isn't good. Wage pressures there are increasing, while productivity growth is dismal. The result: rapidly rising unit labor costs put a floor under service inflation, retarding the CPI's overall progress.

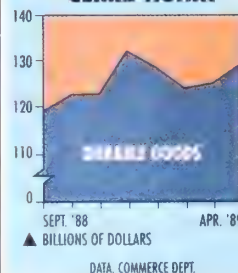
INDUSTRY'S PULSE IS STILL HEALTHY

Inflation in goods prices looks less ominous partly because of the cooler pace of manufacturing. Slower growth in industrial production, particularly in materials, has eased capacity pressures in the earlier stages of processing. So price pressures, too, are easing there.

Nevertheless, the industrial sector is still growing. Manufacturers' new orders for durable goods rose 2.9% in April, to \$129.1 billion, following a 1% increase in March. However, bookings had declined 3.4% in February and 2.8% in January. The April advance still left orders below their December level (chart).

April orders would have been even stronger if not for

FACTORY ORDERS CLIMB AGAIN



Business Outlook

a big drop in defense bookings. Excluding the military, orders were up by 4.9%, and the gains were widespread among electrical equipment, primary metals, nonelectrical machinery, and transportation equipment.

That gets the factory sector off to a good start in the second quarter. The April rise put second-quarter bookings 2.5% ahead of the first-quarter average. And the backlog of unfilled orders continued to grow.

Orders for nonmilitary capital goods rose a solid 5.5% in April. That's strong considering that aircraft orders, which often skew the numbers, were not a big factor. The advance is probably a signal that exports of capital goods are rebounding from their first-quarter slump, and that domestic businesses are still investing in new equipment at a healthy clip.

The strength in orders in April, combined with a still unsettled outlook for inflation, leaves the Fed with little choice but to stay with its current credit policy.

THE DEFICIT OUTLOOK REMAINS BLEAK

The Fed's efforts to steer the economy between inflation and recession aren't made any easier by the federal government's unprecedented borrowing needs, which drain private savings and make the U.S. increasingly dependent on foreign capital.

The economy's continued expansion has kept the deficits steady for the past two years. But the Fed's efforts to slow the economy will hurt prospects for deficit reduction, as revenues come in more slowly and outlays increase for jobless benefits and other subsidy programs.

In April, the government posted an unexpectedly large budget surplus of \$41.4 billion. The Treasury usually has a surplus in April because that's when most individuals pay their income taxes. In April, 1988, for instance, the budget was \$13.8 billion in the black.

This year's tax payments were especially strong. Receipts surged by 18.1%, year over year, to a record \$129 billion (chart). Unusually large tax payments from indi-

viduals accounted for much of the gain. That's why disposable income took a nosedive in April. Moreover, households may have added heavily to savings earlier this year in order to pay their anticipated tax liabilities.

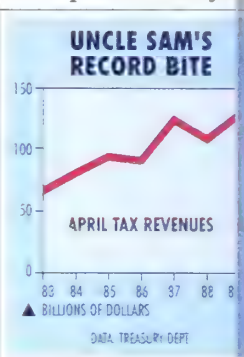
Analysts caution that the boost from individuals was likely a one-time event. And Peter J. Davis Jr., a budget analyst at Prudential-Bache Securities Inc., warns the corporate tax receipts are running below expectation. He says that shortfall will subtract \$5 billion to \$10 billion from the government's 1989 revenue projection.

Still, the April surplus improves the budget outlook for the current fiscal year, which ends in September. So far, the deficit totals \$87 billion, down sharply from the \$105.8 billion racked up during the first seven months of fiscal 1988. Last year's red ink totaled \$155.1 billion. That means this year's deficit will likely be lower than the \$163 billion projection of the Office of Management & Budget, as well as the forecasts of private analysts.

However, the outlook for fiscal 1990 and beyond is bleak. The OMB's projection of a \$92.5-billion deficit next year is a pipe dream. Private analysts, using less sanguine assumptions about economic growth and interest rates, put the 1990 budget about \$145 billion in the red.

With the economy likely to slow because of Fed tightening, future deficit reduction is in jeopardy. Add to that the \$285 billion needed over the next 30 years to bail out the ailing savings and loan associations, and it's clear that the government's drain on private savings will persist.

As long as an expanding economy is so essential to deficit reduction, fiscal policy will be hostage to monetary policy. That means the Fed's performance on guiding the economy could determine the deficit's future.



THE WEEK AHEAD

NEW SINGLE-FAMILY HOME SALES

Tuesday, May 30, 10 a.m.

New single-family homes probably sold at an annual rate of about 590,000 in April, about equal to their lackluster 587,000 sales pace in March. Single-family housing starts increased by 5.1% in April. But a sharp rise in mortgage rates for the month suggests continued weakness in the housing sector.

LEADING INDICATORS

Wednesday, May 31, 8:30 a.m.

The Commerce Dept.'s index of leading indicators most likely will show a 0.6% rise for April. This is suggested by increases in stock prices, building permits, the factory workweek, and a decline in

unemployment claims. The expected gain would partially reverse the recent weakness in the index. It fell 0.3% in February and 0.7% in March.

FACTORY INVENTORIES

Wednesday, May 31, 10 a.m.

Manufacturers' inventories probably grew by about 0.4% in April. In March they increased by 0.5%. Factory orders most likely rose 1.5%, after advancing 1% in March. The gain in orders is suggested by the already reported 2.9% jump in durable goods orders in April.

CONSTRUCTION SPENDING

Thursday, June 1, 10 a.m.

Spending on building projects was probably little changed in April, after falling

for three consecutive months. The weakness is indicated by the downward trend in building contracts, a 2.7% drop in housing starts, and the small increase in construction employment.

EMPLOYMENT

Friday, June 2, 8:30 a.m.

Most economists expect that 175,000 new nonfarm jobs were created in May. In April, only 117,000 jobs were added. May's expected modest gain would be a further sign that the economy is shifting to slower growth. In the first quarter, payrolls grew at an average of 290,000 per month. But job growth in May probably was fast enough to push down the unemployment rate to 5.2% from its level of 5.3% in April.

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Programming language	(100)	Very Good	Good	Very Good	Excellent	Very Good	Excellent	Very Good	Very Good
Speed tests									
Standard operations	(50)	Satisfactory	Good	very Good	Satisfactory	Good	Good	Good	Poor
Mixed use model	(75)	Good	Poor	Good	Very Good	Good	Very Good	Excellent	Good
Transaction model	(75)	Very Good	Poor	Very Good	Excellent	Good	Excellent	Satisfactory*	Very Good*
Documentation	(75)	Good	Good	Satisfactory	Very Good	Excellent	Excellent	Excellent	Good
Ease of learning									
Ease of use	(50)	Poor	Satisfactory	Very Good	Satisfactory	Excellent	Excellent	Excellent	Very Good
Basic	(75)	Poor	Unacceptable	Good	Excellent	Very Good	Excellent	Good	Excellent
Multiuser features	(50)	Very Good	Poor	Poor	Excellent	Very Good	Excellent	Very Good	Poor
Error handling									
Support	(150)	Very Good	Poor	Poor	Excellent	Good	Very Good	Very Good	Excellent
Support policies	(25)	Satisfactory	Good	Good	Poor	Good	Satisfactory	Very Good	Excellent
Technical support	(50)	Very Good	very Good	Satisfactory	Very Good	Good	Excellent	Excellent	Excellent
Value	(50)	Good	Unacceptable	Good	Very Good	Excellent	8.9	8.5	7.8
Final scores		6.8	3.5	5.4	8.3	8.1	8.9	8.5	7.8

InfoWorld, April 10, 1989

The bottom line is 8.9

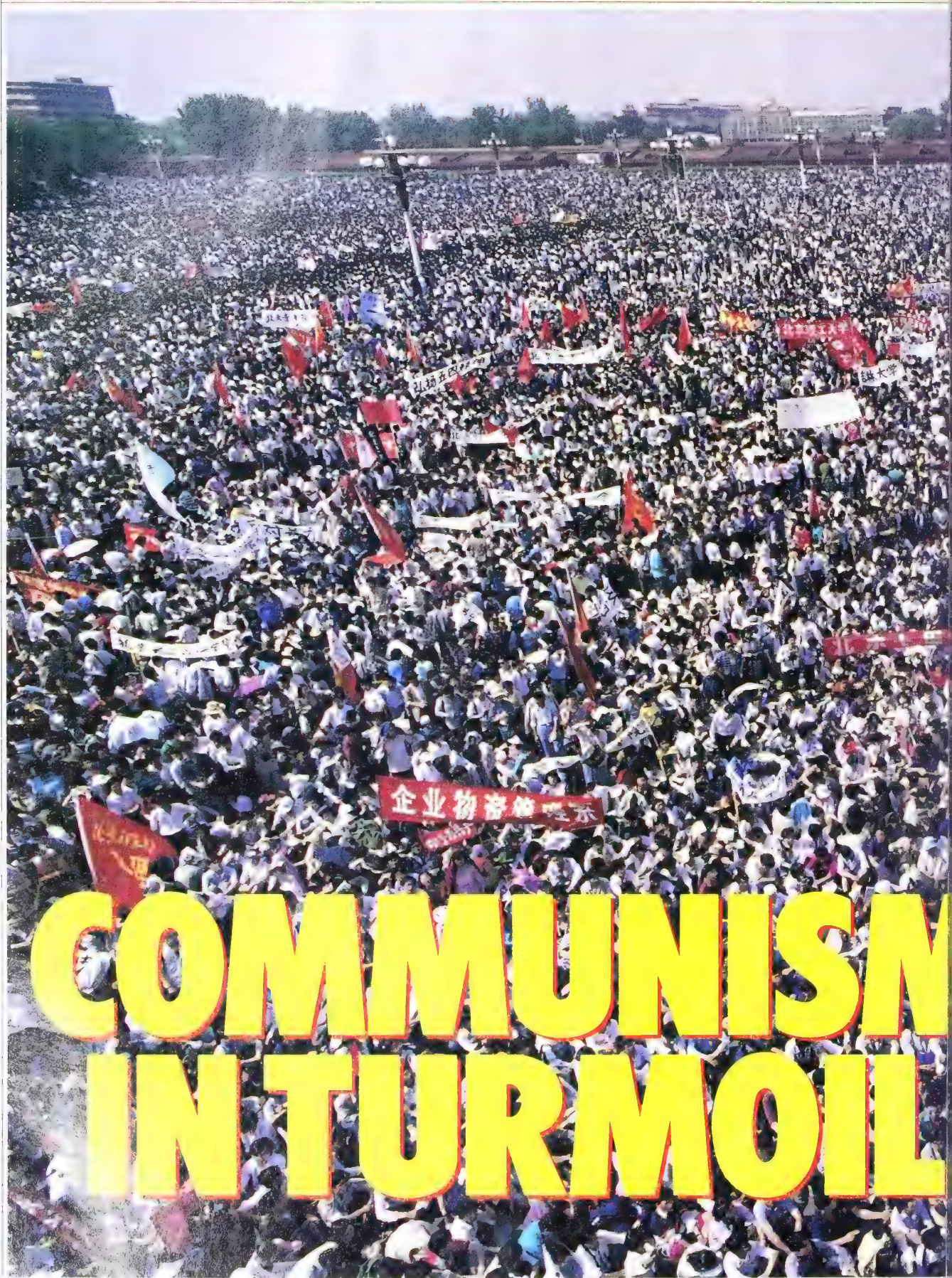
InfoWorld magazine tested and compared multiuser databases. With a bottom line score of 8.9, Borland's new Paradox® 3.0 beat the well-knowns and unknowns hands down.

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B O R L A N D



Tiananmen Square,
Beijing: May, 1989



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A young girl stands near a crowd of students. Behind her, three huge red flags float in the breeze. If it weren't for street barricades and a sea of Chinese faces, these might be kids at an Earth Day celebration. "Nobody cares about 'isms' anymore," laughs a worker. "That's a matter for the ideologists."

Beliefs die hard, but none has outlived its promise longer than communism. Once an economic theory, it was turned by Vladimir Ilyich Lenin into a state religion, and a succession of Russian leaders exported it to the world. In China, where communism triumphed in 1949, Mao Zedong sterilized it into his own puritanical strain, and his followers, too, made Maoism a Chinese export. Again, there was some success—for a time. But now, as the failure of belief turns into a sense of betrayal, that entire world is in turmoil.

A mass movement is building in both the Soviet Union and China to sweep away the very foundations of their societies. The Communist Party in both countries remains responsible for one-quarter of the world's people. But for most of them, the party and the ideology have lost all relevance. Basic demands for personal freedom, a modestly better standard of living—maybe even the chance to visit Paris just once—are running so far ahead of the party's ability to deliver that it's doubtful the system will survive the next decade. Neither self-destructing nor expanding, communism is dying of neglect. The Free World, conditioned not to expect this, hasn't begun to fathom the implications, much less appreciate the opportunities. They're simply beyond our comprehension.

The seismic shock that rumbled across China in May jolted the system. In a single week, the people stripped the Communist Party of its legitimacy and set China on a course that may be unknown for years. Upheaval could be followed by violence. This huge nation now teeters on a knife's edge, its aging, once revolutionary leaders



threatened with, of all things, a revolution by their own children calling for democracy.

For more than a decade, China's incipient embrace of capitalism seemed to offer the answer. With economic prosperity, we reasoned, there could be no turning back. But with no political change to accompany his economic reforms, China's most progressive leader in 40 years, Deng Xiaoping, badly miscalculated. It's still conceivable that the turmoil will propel the nation even further into freer markets and political values. But the most plausible outcome is a country split in two: a coastal region that welcomes reform and a vast interior that remains stagnant.

Nothing remotely like that could happen in the Soviet Union. Russia is an industrialized nation whose economy is slipping backward, but it is also an empire both in geography and spirit. Its calcified, rigidly controlled economy is broke, its machinery rusting, its workers incapable of responding to Deng's aphorism, "to get rich is glorious." But the Soviet Union is also a superpower, its ability to control its people powerful, its will to sacrifice when threatened undisputed.

**Deng's economic reforms
looked promising at first
—but he failed to match
them with political change**





THE PHILOSOPHIES
OF LENIN AND MAO
SEEM HOPELESSLY
IRRELEVANT TO
MOST RUSSIANS
AND CHINESE—
FORCING THEIR
LEADERS TO SEEK
PROGRESSIVE
ALTERNATIVES

In many ways the reforms in China and the Soviet Union are mirror images. Mikhail S. Gorbachev started at the top, and his entire campaign is still a giant exercise in state-directed planning. His failing economic program, *perestroika*, literally means to restructure the economy, a feat the engineers and technocrats in the Kremlin are treating like some vast construction project. *Glasnost*, Gorbachev's great success, was also decreed by the state. But it has already given the average Soviet citizen more openness than he once dared to imagine: elections, debates, muckraking, irreverence, a flourishing of the arts not seen since pre-revolutionary days. This *half glasnost*, as the Soviets nervously call it, only whets the desire for more.

PHYSICAL NEGLECT. But the Soviet people know most of all that what the state decrees, the state can take away. *Glasnost* is a priceless but fragile intellectuals' movement. The main event is now the economy. To stroll across Red Square to GUM, Moscow's giant department store, is to see a nation in such decline that it's hard to imagine how any government could make the necessary changes.

See for yourself: Soviet-made cameras with lenses like dumbbells, bath towels the weight of

dish towels, soap the size of a Chiclet, videocassette recorders as big as suitcases, and cars and trucks from a Hollywood set of the 1950s. The food stores are truly empty, the farm policy is a shambles, the ruble is 16 times less valuable than what the state says. Then there is the physical neglect: ruined roads, busted streetlights, peeling paint, stripped cars, oil slicks on the Volga, lead-poisoned air.

For four years, Gorbachev has been tinkering with this calamity—and it's only getting worse. The workers want the better living standard that he has promised, as long as it comes with no inflation, no unemployment, and no increase in hours on the job. The reeducation program alone is staggering.

China never had this problem because it had nowhere to go but up. Before mid-May, it was roaring down the road to capitalism, exploding with growth and new wealth and racing far ahead of political reform. With the right leaders, it can still revive that pace. By contrast, the Soviet revolution is epochal and, like a medieval cathedral, may never be completed. Whatever the pace of change, the events we're now witnessing in both countries are turning to be the most important of our time.

By Robert J. Dowling in New York

CHINA BEGINS A NEW LONG MARCH

Torn between an outdated system and a new entrepreneurial spirit, the nation lurches for

Deng Xiaoping tried to remake Chinese Communism by launching a bold series of economic reforms beginning in 1979. But a decade later, the tide of history is sweeping the nation with much greater force than Deng could ever have dreamed. His tragedy is that he thought he could open the box halfway, allowing self-interest to enliven the economy without permitting political freedom. He was wrong. Suddenly, his decaying socialist state, which he merely wanted to revitalize, is under siege by a dynamic New China with a mind of its own.

The dramatic confrontation between the government and the governed in the streets of Beijing and dozens of other Chinese cities makes it clear that the Old China is headed for fundamental change. The military's refusal to crack down on the demonstrators has badly damaged Premier Li Peng and other hardline conservatives who wanted to turn back the

clock. Reform-minded Zhao Ziyang, who was apparently stripped of his power as Communist Party boss, may be able to turn Li's debacle with the military into his own political comeback.

Whoever prevails at the top level of China's political leadership will find that the ground has shifted under his feet. A New China is asserting itself. The students' long vigil in Tiananmen Square is only one example. Equally important is the emergence of a thriving entrepreneurial China. Mostly located in such coastal regions as Guangdong, Fujian, and Jiangsu provinces, it is successfully resisting the central government's ability to rein it in. In these areas, the private sector, once conceived as a mere adjunct to the socialist state, is growing so quickly that it threatens to dwarf the bureaucracy that spawned it.

The New China is united by an intense desire to think and act independently, without the state's heavy-handed inter-

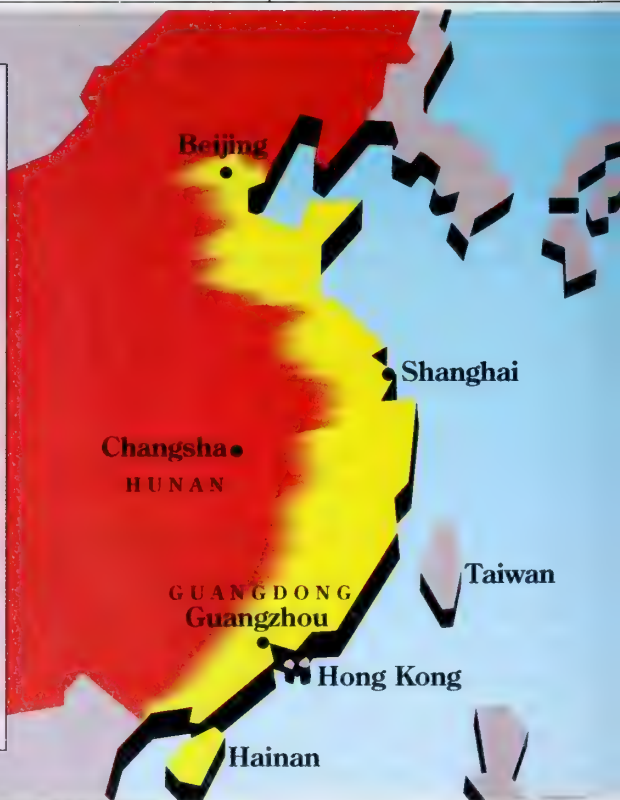
ference. Students, intellectuals, vants, and many others are de the right to debate ideas publi cize the government, and influ cymaking. Entrepreneurs and r are making their own decisions can no longer fully control the p the provinces can't control the o the cities can't control the to villages.

NO QUESTIONS ASKED. Old Ch state, doesn't know how to cope new challenges. Schooled in years of the 1930s and 1940s leaders are used to giving or being obeyed without questi year, when the economy overhe inflation caused panic buying, sponded with administrative fia than subtle guidance. And in th days of May, when protesters streets, the old guard refuse knowledge its errors and respo students' single demand: dial

WHERE THE TWO CHINAS ARE DRIFTING APART

DECLINING CHINA		EMERGING CHINA
56%	SHARE OF TOTAL INDUSTRIAL OUTPUT	44%
5.1%	ANNUAL RATE OF INDUSTRIAL GROWTH	24%
SET BY BEIJING	PRICES AND WAGES	DETERMINED BY FREE MARKETS
COMMUNIST PARTY APPOINTEES	MANAGEMENT	ENTREPRENEURS
SUPPLIES DOMESTIC MARKET	TRADE	EXPORT-ORIENTED
STATE-CONTROLLED BANKS	FINANCING	PRIVATE LENDERS

DATA: BW



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time China had to estab-
political order it took 38
911 to 1949.

nd other foreign govern-
een dumbfounded by the
n China's political climate
Ironically, both America
ts have provided rallying
party's critics. The inci-
eorge Bush's visit to Bei-
leading dissident Fang
ted to dinner but forcibly
n attending will stand in
trigger. So, too, will the
leader Mikhail S. Gorb-
ne students in Tiananmen
ed as a political visionar-
any foreign investors have
at-footed (page 51). Sever-
panies, including Dow
and Warner-Lambert Co.,
w plants in China in the
g up to the huge demon-
late as May 8, Warner-
nanced a 50-50 joint venture
4 million capsule-making
hou.

l in Beijing doesn't mean
and other foreign compa-
rforced to close down their
trading with China. But it
t foreigners may have to
n selected pockets along
ere more liberal thinking
will need to learn how to
with the new entrepreneur-

dong province, adjacent to
t's rich by Chinese stan-
agnet for Hong Kong in-
creasingly, local officials
poses at Beijing when they
ves to slow down economic



**EXPORTING THE
CROWD: THE VIGIL
AT TIANANMEN
SQUARE IS ONLY THE
MOST VISIBLE SIGN
OF CHINA'S
UPHEAVAL.
"NOBODY CARES
ABOUT 'ISMS'
ANYMORE," SAID
ONE WORKER**

growth or cut back construction. They insist they're complying with Beijing's will while only "keeping one side of the net open" (page 40).

One way clever local officials escape Beijing's net is through projects that have a foreign partner. Officials use companies conveniently set up in the British colony of Hong Kong, channel investment through them, and call it "foreign" investment. Some factories in Guangdong raise money by selling shares in their company to their own employees—even though the legal status of this is far from clear. Others raise investment money from rich farmer co-operatives, so that even when Beijing

In stunning contrast are inland provinces such as Hunan and Guizhou, which are poor, backward, and ideologically rigid. At a time when coastal provinces are experiencing extraordinary growth, Hunan and Guizhou actually slipped into negative growth in the first quarter of this year. They're depending on the state for millions of yuan because of a cash shortage and losses in poorly run state factories. In part because the inland provinces aren't gaining as much from economic reforms, they support Li and his conservatives in pressing for a slowdown.

But this Beijing-dominated sector of China's economy is clearly losing ground. State-owned industries account

for a dwindling share, down to 56% last year, of the country's industrial output. A behemoth of waste and lagging productivity, the state sector would be bankrupt were it not for massive subsidies from Beijing. State-owned factories' growth in output in the first quarter of 1989 was 5.1%—compared with 24% for cooperatives and private enterprises. "The gaps are widening all the time," says Guo Zhishan, an economist at the State Commission for Restructuring the Economic System.

The severe austerity program that Li initiated last fall to curb a double-digit inflation rate is hurting state-owned sectors much worse than private ones. Unlike private enterprises that will use unauthorized means of raising money, the state-owned sector has no choice but to suffer. Squeezed by the retrenchment, state-run banks won't pay out cash on de-

mand—even on presentation of letters of credit. One U.S. company reports that 60% of its Chinese customers lack cash to pay for contracted goods or services. Another American business says that final payments were held up six months on four separate contracts.

"Cash only" is the order of the day, and it seems that much of that cash is out of the state's control. The U.S. embassy in Beijing estimates that 80% of the cash in circulation is outside of the official banking network. In the Beijing area, factory managers worried about

**Bush's and Gorbachev's
visits to Beijing have only
served as rallying points
for party critics**



bank freezes pay 10% extra on the black market for large-denomination notes to keep major transactions out of bankers' hands. One Chinese company even turned up at a foreign bank in Hong Kong to cash in a huge wad of American Express travelers checks—yet another way of avoiding a bank freeze on funds or black-market rates for bank notes.

INTIMIDATING. In addition to keeping its money out of the state banking system, the private sector can sidestep payment of taxes to Beijing. Although China has drafted numerous tax rules, it still lacks a collection base—so informal tax negotiations between government officials and factory managers take place on a case-by-case basis. As China's official economy shrinks, so will government revenues. At the most basic level, the New China is now starving the Old China for funds.

The country's ever-shifting political mosaic has always been intimidating for the U.S. and other foreign investors. Ever since Deng introduced some elements of capitalism 10 years ago, the two Chinas have existed side by side. But the state-run factories and trading companies once were much stronger, and they were reasonably simple for foreigners to understand because of their rigid bureaucratic mind-set and emphasis on order.

Now, the New China has grown larger, stronger, and richer. "Imagine the Polish economy increasingly encircled by the West German one, and you have the situation in China," says one American executive in Beijing. That means any company interested in trading or investing in China will have to work even harder to understand the background of its Chinese business partners.

How foreign companies will manage the current upheaval could depend a great deal on their size, strategy, and agility. Large companies that must deal at the ministry level may face a grim outlook unless they trade with high-priority sectors such as transportation and communications. General Electric Co. sales of engines to China's commercial airline have been booming, for example, but its military sales have been stalled. It all depends on where the bureaucracy decides to place its limited resources.

MORE BUSINESS. Large-scale investors are certain to see tough times as the state-owned partners have trouble raising money and supplying materials. But ticket investments—in which a U.S. company finds a local partner, receives approval from the central government, and then obtains partial funding from state-owned banks—will be few in number.

RICH CHINA, POOR CHINA: THE GAP KEEPS GROWING

Only 60 miles from Hong Kong, in China's Guangdong province, 2,000 workers feverishly assemble ceiling fans. Their 18-month-old factory, owned by the local township, turns out 5 million fans a year. Most of the output is exported to the U.S. through a Hong Kong company that invested \$9 million to equip the factory. Despite a national squeeze on credit, Sien Hua Electronics Manufacturing Co. easily raises money and finds all the materials it needs.

More than 360 miles north in Hunan province, the production line is quiet in the state-owned Hunan Computer Factory. Expensive imported equipment sits draped with dust covers in locked chambers. In a cavernous room, a few workers piece together Chinese-designed computer terminals. The plant makes only 5,000 terminals a year—the same number that a typical factory in Taiwan can turn out in about two weeks. Although Hunan Computer is in a priority industry, it is strapped for parts and is still waiting for a promised \$2.7 million cash infusion from Beijing.

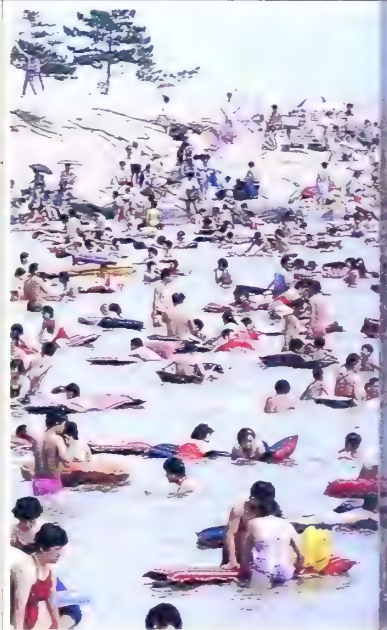
NO MILLIONAIRES. Nowhere is the contrast between the two Chinas greater than in these two southern provinces. Guangdong's fan maker is in the New China, the country of entrepreneurs, higher living standards, booming exports, and foreign investment. The terminal plant in Hunan is in an inland province of the Old China. Hunan is weighed down by bureaucracy, shows slow

growth in exports, and attracts little foreign money. Not surprisingly, while industrial output in Guangdong rocketed 26% in this year's first quarter, Hunan's fell slightly.

Tensions between the haves and have-nots are growing. Prosperous Guangdong is buying up Hunan's rice, hogs, steel, and nonferrous metals. And about 1 million Hunanese, mostly farmers, have flooded into Guangdong's factories. Hunan officials complain that their rich neighbor is exporting inflation, sucking out resources, and eating up potential exports, depriving the province of hard currency. Last year, Hunan exports barely managed a 3% increase, to \$630 million, while Guangdong's exports jumped 30%, to \$5.3 billion, according to Hunan officials.

One reason for the sharp difference lies in the character of the people. The Cantonese of Guangdong are traditionally skilled at business and have little flair for politics. It's the Cantonese who have migrated in large numbers to Hong Kong, the U.S., and parts of Southeast Asia, where many have made fortunes. Hunan, by contrast, has nurtured famous revolutionaries and politicians—Mao Zedong and Hu Yaobang among them—as well as scientists and scholars. But no millionaires. "Hunan people are good at fighting wars but not so good at economic development," concedes Hunan Vice-Governor Yang Huiquan.

These traditions still have a strong pull on the Hunanese. Some farmers in the



mountains think it's dishonorable to do any business at all, says Yang, but they grow only enough grain to eat. A rice paddy from Mao's old home in Shaanxi, Tang Ruiren, 59, runs a simple taurant. "I keep my prices low because I am serving Chairman Mao's guests," he explains. "We do have to accept the ways. But the ways of the past had good points."

RESENTMENT. Geography also contrasts. Hunan has rail links to the rest of China but no ocean ports. Guangdong's long coastline has a history of international trade. Just in the past few years, thousands of Hong Kong manufacturers have transferred production to Guangdong, less than three hours away by boat or train, where labor and materials are cheaper than in the Colony. T

er. Otis Elevator
nc. and Chrysler
Corp., for exam-
le, both have had
troubled opera-
tions and know
how difficult it is
to deal with the
state sector.

In a better posi-
on are the small-
er, more flexible investments. For some
U.S. companies, China's cash shortages
and loosened central control will mean
more business than ever. Russel W. Du-
all, president of Nebraska-based China-
American Technologies, is manufacturing
25,000 paging systems for hospitals,
factories, and hotels. At first he tried to
establish ties with what he calls a "do-
nothing" state-sector company. But Du-
all then found an entrepreneurial pri-
vate company in the Beijing suburbs.
The message that America needs to

As private enterprises
surge ahead, growth
at state-owned factories
is almost nil



hear is to scale
down their proj-
ects," he says.
"The bigger the
risk, the longer
the Chinese will
take to decide
anything."

The country's
cash crisis also
means that the

Chinese are willing to give foreigners
more equity and management in joint
ventures. In some recent cases, the Chi-
nese have even allowed 100% foreign
control for priority projects because they
could not come up with enough cash to
make it a 50-50 joint venture. "I turned a
French joint-venture deal into a 100%-
owned French operation in two weeks
because the Chinese wanted it to go
ahead," says Lucille A. Barale, a Chi-
nese-speaking lawyer in Coudert Broth-
ers' Beijing office.

Weakness in Beijing, in fact, isn't bad
for business in certain provinces of Chi-
na. "They hate Beijing as much as the
big American companies do," says a vet-
eran U.S. China trader. Local officials
have a powerful tool: They can keep a
big percentage of local tax receipts and
foreign currency earnings for their own
enterprises.

'GOING VERY NICELY.' Not surprisingly,
that means the provincial Chinese prefer
projects that are in their own interest,
but not necessarily in the national inter-
est. That probably explains why so many
cigarette factories and breweries have
sprouted up across China: They pay he-
fty local taxes. For those who market
cigarette-making equipment, paper, and
filters, that translates into big money.
At the local level, business is often quite
good. "If a foreign investor doesn't need
to borrow or build facilities, the deals
are going very nicely," according to Bar-
ale, "especially if the venture involves



**ENTREPRENEURIAL
CANTONESE LIVE
"THE GOOD LIFE"
IN GUANGDONG
PROVINCE (LEFT),
WHILE TRADITIONAL
HUNANESE FARMERS
LIVE IN POVERTY
AND SHUN
BUSINESS AS
DISHONORABLE**



employ an estimated 2 million work-
making clothes, toys, purses, fans,
wave ovens—even disk drive heads.
Guangdong was one of two coastal
provinces selected by the state to be a
pilot in economic reform during the
1980s. That gave it the privileges,
and flexibility to transform itself
into a "fifth tiger" economy. More than
any other, its consumer products are sold at
market prices, and its state sector is
shrinking. Now others along the coast
are trying to emulate the entrepreneurial
success.

Local governments in Guangdong
are launching go-go companies. One district in
Guangzhou, the provincial capital, asked
its housing bureau to become an inde-
pendent company, now called
Guangzhou Donghua Enterprise Corp. It

even floated some shares to the public
last January. With its coffers full from
building housing, it is now investing its
own cash in a residential project in Thai-
land. If the province opens a stock ex-
change later this year, as planned,
Donghua would be the first company to
list its shares.

Guangdong's success is stirring envy
among the Hunanese, and Hunan offi-
cials especially resent Guangdong's spe-
cial status. "Coastal areas already have
geographic and economic advantages. If
the policies are not equal, of course we in
Hunan can't compete," says Vice-Governor
Yang.

Late last year, Hunan protested to
Beijing. A sympathetic Premier Li Peng
rescinded a few of Guangdong's privi-
leges. Its three special economic zones,

for example, used to keep all their excess
export earnings, but now they must re-
mit 20% to the state. In typical Guang-
dong fashion, however, the new hardship
only made the factories more resource-
ful. They have improved efficiency, bor-
rowed from private banks, and even is-
sued shares to employees to keep up the
cash flow.

Trying an if-you-can't-lick-'em-join-'em
strategy, Hunan Computer is now set-
ting up a plant in Shenzhen, one of the
special zones in Guangdong, hoping to
attract some foreign customers for its
computer terminals. Other Hunan enter-
prises have moved there, too. But such
moves seem only to push the New China
forward.

*By Dori Jones Yang in Guangdong and
Hunan*

EPSON PRINTERS

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Don't Give It A Second Thought



The new Epson LX-810



The new Epson LQ-510

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**WHEN YOU'VE GOT AN EPSON,
YOU'VE GOT A LOT OF COMPANY.™**



WITH DENG (TOP) SCHEDULED TO STEP DOWN BY YEAREND, AND WITH THE POWER OF LI PENG (BOTTOM LEFT) IN QUESTION, CHINA'S BEST SHOT FOR A SMOOTHER TRANSITION MAY BE ZHAO, WHO COULD HAVE A STUNNING NEW MANDATE FROM BOTH THE MILITARY AND THE PEOPLE TO PUSH AHEAD WITH HIS REFORM PROGRAM

China and the outwardly focused, entrepreneurial trade in the coastal areas of southern China," says Donald M. Anderson, U.S. Consul General in Hong Kong.

Although that may seem like unorderly chaos to an outsider, China is far from the sort of total breakdown that it suffered earlier in the century. Unlike the warlord period of the 1920s, the central government still wields national authority on some issues. Governors are appointed by Beijing, which can depose or transfer them. Provinces don't have law-making functions, as states do in the U.S. Local police, though they were not used against the student demonstrators in Beijing, still have power. When the city of Guangzhou was invaded by several million job seekers from other provinces in February, local police "persuaded" almost all to return home within weeks.

But history would indicate that the conservatives are fighting a losing battle. Even if they were to prevail in Beijing, they could not revoke economic powers without a fight. The events of May show how weak and divided the central leadership is. "Recentralization is a dead letter," says one respected U.S. businessman in Beijing. "The people in the second China realize that Beijing is a paper tiger. It has no authority."

manufacturing and good technology."

Hong Kong Chinese companies have understood the thriving New China for years, but most large U.S. and European companies are only now discovering the second state. Dealing with it is more complex than negotiating with the old bureaucracy, and sometimes, though not always, involves paying "commissions" to officials or changing money at gray-market rates. But it's a far more efficient and cash-rich economy than the state sector.

The need to work with the emerging Chinese economy is finally getting through to the headquarters of large American companies that invested a lot of time and money developing relations with state ministries and factories in the '80s. They're now dispatching a different type of China trader to the mainland,

downgrading or consolidating their white-collar presence, dropping out of the Chinese bureaucracy's endless round of banquets, and increasing the profile of hands-on salespeople, floor managers, and engineers. U.S. companies that have concentrated most of their investments in Beijing and Shanghai will have to follow the lead of savvy Hong Kong, Taiwanese, and Korean investors in targeting provincial areas.

UNORDERED CHAOS? How long will it take for the two Chinas to settle their differences? The conflicts between coastal and inland areas are not new, but they were suppressed for many years after the Communist takeover in 1949. "Throughout Chinese history, a tension has existed between the inwardly focused, administrative bureaucracy of the central government in northern

But it's impossible to predict just how the new order will be created. Before the recent upheaval, Deng said he would step down from his remaining official post, chairman of the party's Military Affairs Commission, later this year. He may now try to hang on for as long as possible. But in any event, he is not expected to live much longer.

China's best shot for a smooth transition is Zhao. If reaffirmed as Communist Party boss, he would have a stunning new mandate from the military and the people to push ahead with his reforms. He would face massive problems, such as inflation, shortages of raw materials and energy, and corruption. But at least he would be able to chart a direction for China and carry the bureaucracy and the military, and the people, behind him.

Whoever finally emerges will have to



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FILLED ISSUES

be able to govern the official China, and that requires a Communist able to negotiate with the provincial powers and control the military. But such a person will also have to be adept at expanding foreign-trade relations and using indirect levers to guide the entrepreneurial "second China." That will require a sharp break with the ideological approach of the past 40 years.

The next leader almost certainly will have to devise a new political system for China or dramatically alter the one that exists. Few China watchers believe that Western-style, multiparty democracy will work in China anytime soon. Although students are calling for "democracy," many of them aren't asking for the overthrow of the Communist Party itself. They believe that the party can

become more democratic and less corrupt. They want a strong government but one that's responsive and willing to listen. To do that, Chinese Communism as it is known today will have to change so completely that it may no longer be recognizable.

By Dori Jones Yang in Beijing, with Leah Lee and Robert Neff in Hong Kong and William J. Holstein in New York

SEVEN DAYS IN MAY: A BEIJING DIARY

Dori Jones Yang has been BUSINESS WEEK's Hong Kong bureau chief for seven years and a frequent traveler to China. She arrived in Beijing on May 18. Here is her firsthand report.

DAY 1: At night, in the pouring rain, the students in Tiananmen Square are festive but determined. Trucks packed with workers draw cheers from the crowd as they display rain-soaked banners made from sheets, with red and black lettering.

In the square, several thousand hun-

nese, normally so reticent, are talking politics with anyone willing to listen.

Below the famous portrait of Mao Zedong on Tiananmen Gate, a crowd of workers gathers around me. A woman, tears in her eyes, says she is moved by the young strikers. She puts her hand on my shoulder and says in Chinese: "Thank you for reporting this news."

Shortly after midnight, fear sets in. On television, Premier Li Peng fiercely announces military measures to end the "turmoil." Party chief Zhao Ziyang seems to have vanished. I hear reports

DAY 4: On Sunday afternoon, at a major intersection, a student calls to the masses through a bullhorn. Suddenly someone shouts "Block the truck!" A crowd rushes to stop a military supply truck. They force it to turn around. That evening, rumors spread that the army will crack down. Some claim the government is willing to kill up to 200,000 to ensure 20 years of peace.

"Are you afraid?" I ask one citizen. "This is a cause worth dying for," he says. We're certain the time has come.

DAY 5: For the third night, the army has failed to attack. Helicopters still buzz over the square dropping propaganda leaflets. Red banner with university names wave in the breeze. A music student in jeans says he collapsed from exhaustion and hunger in the night and was taken to the hospital. But he was angry that some student wanted to retreat. "We represent all the people. We can't leave," he says.

DAY 6: The street are calmer. News reports say that the soldiers have withdrawn. The absence

of any real knowledge is unbearable. **DAY 7:** The mood is calm, but the leaders still have not announced their response. The power struggle at the top must be intense. In front of Zhongnanhai, a professor and a worker are debating. "It's not Li Peng's fault," says the worker. "He's just an engineer."

The professor responds angrily. "Even a kindergarten child knows sweet from sour. If Li Peng is not capable, he should step down. Such a big country of 1 billion people. Why let a fool run it?"



RUMORS THAT THE GOVERNMENT HAD ORDERED MASS KILLINGS GAVE WAY TO A CAMARADERIE BETWEEN PROTESTERS AND THE MILITARY

ger strikers are sitting limply in buses. One, from Beijing University, leans out a window. He hasn't eaten for five days, but he drinks sugar water, so he isn't worried about dying.

Four burly cab drivers push up. In another era, these workers would not have befriended an intellectual, but now they shake the striker's hand and offer him cigarettes. "Thank you," the cab drivers say. "Take care."

DAY 2: Students, given free passage by railway workers, are pouring in from all parts of China by train. The Chi-

naese are keeping the soldiers out of the city. I go to bed praying for "people's power" to stop the army.

DAY 3: At 8 a.m., military helicopters buzz overhead. At 10 a.m., martial law is declared. In Tiananmen, a loudspeaker urges peaceful resistance. "Reason will win over brute force," says one banner. I go to the gate of Zhongnanhai, the walled compound that houses the nation's leaders. The scene is tense, especially since journalists have been forbidden to report. "You'd better go quickly," someone whispers urgently.

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FOREIGN INVESTORS ARE WARY— BUT THEY'RE NOT RUNNING

overseas companies are pressing ahead, despite the unrest and a slowing economy

protesters with bullhorns
e whipping up excitement at
g's major square, but at the
anguo Hotel, the air is as
ver. In the lobby, an opera
22-piece orchestra entertain
seemingly unfazed by the
of-war between authoritar-
democracy.

d the scenes, many foreign

executives
e rooting
farmers to
ring that
ical free-
y bolster
he long
while some
companies
g staffers
outlook
Chemi-
Bearing,
d many
they are
lead with
factories

st of consumer and industri-
ble). "China has gone down
ward more private property,"
ntal Petroleum Corp. Chair-
nd Hammer. "They realize
nd that has to continue."

ina traders and investors are
to gut-wrenching political
and they tend not to scare
opportunity to sell goods to a
a billion is just too big to
even the most seasoned vet-
have to rethink their willing-
k it out if the unrest drags
S. executives fret that Bei-
less hospitable to foreign
if government hardliners
manage to reassert their au-
ries Edward A. Gencarelli,
representative for United
nc.: "Investment is very
ollars don't like instability."

VALRY. The mounting politi-
nty only exacerbates a busi-
e already soured by economic
nt. Shortages of coal and oil,
e, have slashed steel produc-
tel industry, suffering from
g, now faces even leaner

times as tourists cancel China trips. A
worsening cash squeeze is leaving Chi-
nese buyers short of funds to pay for-
eign suppliers. And as assembly workers
join the protests, production has been
slowed at such U.S.-Chinese joint ven-
tures as Hewlett-Packard Co.'s Shenzhen
instrument and computer plant.

With such roadblocks multiplying,
many overseas investors indicate that

ventures making contact lenses and is
planning a fourth venture to produce
soap. But they are all small, with the
company investing just \$1 million.
Among larger joint manufacturing ven-
tures, Dow Chemical Co. is investing
only \$25 million in a partnership with
Zhejiang Chemical Corp. to build a \$50
million polyurethane foam plant near
Shanghai. "No matter how big you are,"

declares Richard
Brecher of the U.S.-
China Business
Council, "you'll want
to start small."

If anything is
headed for cutbacks,
it's likely to be big,
capital-hungry ener-
gy projects. Dis-
agreements with
Beijing over prices
and marketing meth-
ods have marked Oc-
cidental's \$750 mil-
lion coal-mining joint
venture in northern
China. And with Chi-
na low on cash, At-
lantic Richfield Co.
may have a hard
time finding buyers
for natural gas from
a South China Sea
project scheduled to
open in 1993.

Still, Oxy and Arco
show no signs of
fleeing now that po-
litical turmoil has
been heaped on top
of economic risk.
Nor do the other for-
eigners. "Things do
not go in a straight

line there," says Bruce Vernor, vice-
president of China Energy Ventures Inc.
"You go two steps forward and one step
back, if not two steps back." With that
in mind, foreigners may hunker down
and limit their risks. But barring a
wholesale crackdown, no one's thinking
of giving up.

*By Dori Jones Yang in Beijing and Wil-
liam Glasgall in New York, with bureau
reports*



SOME U.S.-CHINA JOINT VENTURES

Company	Product	U.S. investment Millions of dollars
OCCIDENTAL PETROLEUM	COAL	\$187.5*
MCDONNELL DOUGLAS	AIRCRAFT	NA
XEROX	COPIERS	15.3
WARNER-LAMBERT	DRUG CAPSULES	9.0
HOECHST CELANESE	CIGARETTE FILTERS	8.2
PPG INDUSTRIES	GLASS, CHEMICALS	7.0
BABCOCK & WILCOX	BOILERS	6.0
H.J. HEINZ	BABY FOOD	6.0
GENERAL BEARING	BEARINGS	5.0
HEWLETT-PACKARD	TEST EQUIPMENT	5.0

*Estimated NA = not available

DATA: U.S. INVESTMENT IN CHINA IN THE 1980S (U.S.-CHINA BUSINESS COUNCIL); BW

they likely will limit themselves to such
liberal-minded southern provinces as
Guangdong or Fujian. Even with Beijing
in turmoil, notes Martin M. Pollak, exe-
cutive vice-president at National Patent
Development Corp., "there's a terrific ri-
valry among cities to get new business."

But the foreign executives who do
head for China's hot south are still likely
to tread cautiously. National Patent, for
example, has opened three Chinese joint

GORBACHEV'S



REFORMS

Will They Work?

On the streets of Moscow, nobody erects signs without permission. So when a 15-footer went up on Kutuzovsky Prospect, a main thoroughfare to the central city, asking: "What are you going to do for *perestroika*?", even jaded Muscovites took notice. To them, the message was all too apparent: After four years of economic failures, Mikhail S. Gorbachev is desperate—openly admitting that he alone cannot remake the Soviet Union and pleading on propaganda posters for help. That's one view. The



Special Report

other is that the Soviet leader is cranking up the biggest campaign of his life. He is laying down the gauntlet for an economic battle in which dozens of powerful ministries will be disbanded, factory managers will finally have to perform, and the path will be cleared for less defense spending and more investment in private business. Even price reform, the most necessary but politically dangerous step of all, may be put into play.

STILL INERT. If Gorbachev takes the leap, it will be for solid reasons. The Soviet Union—military superpower, ideological beacon—is in serious economic trouble. Its admitted budget deficit is at least 100 billion rubles, \$160 billion dollars—and probably much more—though years of cooked books make it unclear. Economic growth is creeping along at 1.5%, and the money supply, fueled by rising wages, is out of control.

Walk the potholed streets of Moscow: The overriding impression is of an economy in gridlock. Sugar is on ration. Potatoes and meat are also scarce. In state stores, computers can't be found. Yet the shortages have produced a boom in the black-market economy (page 66). Some Russians believe the lines are longer and economic conditions as severe as any time since Stalin.

What's happened in four years is that Gorbachev's reforms have produced pockets of surprising dynamism—from the 100,000 Soviet-style private companies to the burst of economic nationalism in the Baltics, where even local Communist Party leaders want people to own their own houses, businesses, and farms.

But these changes have not jolted the economy out of stagnation. The reforms have hurt more than helped because they have disrupted the old ways of central planning without replacing them with the features of the market: free prices and a convertible ruble.

Soviet leaders admit that *perestroika* is in trouble. "It is *Mission Impossible*," Prime Minister Nikolai I. Ryzhkov told BUSINESS WEEK. But he fears upheaval if a speedup takes place. Others urge dras-



tic action: "All my worries are about the nearest two or three years," says economist Nikolai Shmelev. "Ordinary people need something in the shops."

The China turmoil is another reminder of the vulnerability of stagnant leadership. Compared with the rigid rulers in Beijing, Gorbachev's campaign for openness made him a champion of the protesters in Tiananmen Square. But at home, where *glasnost* can't put goods on the shelves, openness is at best a palliative for disaffected Russians.

Gorbachev's answer to this emerging disaster is politics. While fumbling on the economy, he has gathered support

from the party and from reformers elected to the Congress of People's Deputies on Mar. 26. As 2,250 delegates to the new Congress trickled into Moscow for a week-long meeting starting May 25, his political strength was never greater.

Gorbachev is counting on the Congress to give *perestroika* a lift with a vigorous shake-up. He is preparing to dump the blame for the failure of *perestroika* on the government.

That Congress will elect a 542-member Supreme Soviet, which will be the first legitimate parliament since the revolution. Once the body is elected, the entire

A STARTLING ROAD TO REFORM

1985

MARCH Gorbachev, 54, becomes youngest Soviet leader since Stalin

APRIL First public actions: Shutting down vodka stores and opening campaign against corruption

MAY U.S. meets Soviets for first trade talks in seven years, agrees to import Soviet furs

NOVEMBER Meeting in Geneva, Gorbachev and Reagan agree to new scientific and cultural exchanges and to reopen direct New York-Moscow flights

DECEMBER U.S. banks lift ban on lending to Soviets, join British bank in \$400 million loan

1986

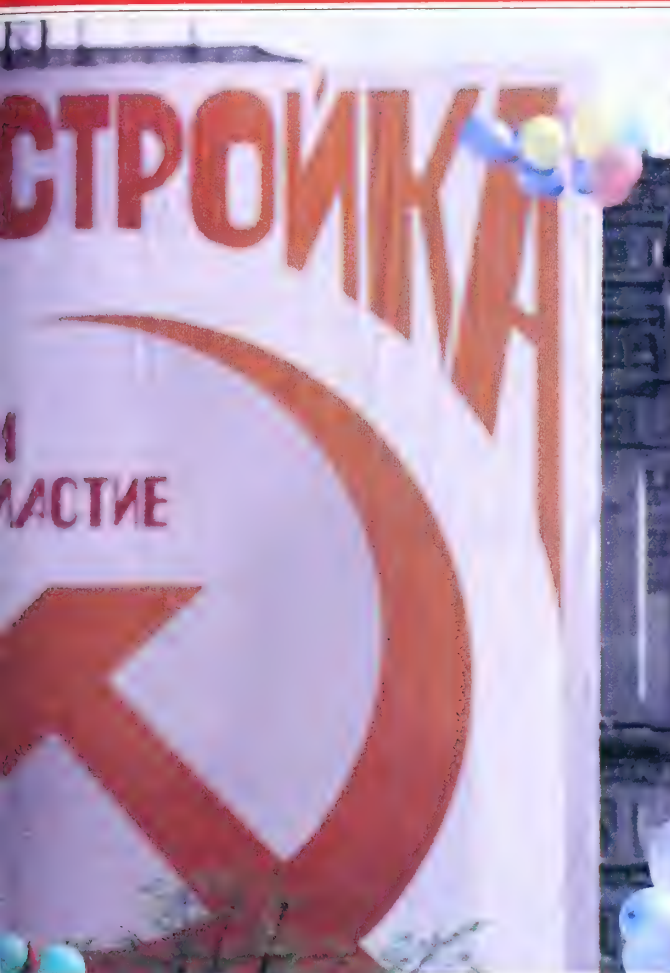
JANUARY Soviet Foreign Minister Shevardnadze visits Japan in historic move to repair relations

FEBRUARY At 27th Communist Party Congress, Gorbachev says he'll double national income by 2000, calls for complete Soviet economic overhaul

APRIL Nuclear accident at Chernobyl costs billions

JULY In Vladivostok, Gorbachev asks for new political and trade relationships with Japan, Korea and other prosperous Asian capitalist countries

AUGUST Reagan Administration agrees to subsidize exports of U.S. wheat to Soviets. Politburo approves plan to allow foreign companies to set up joint ventures for first time since 1920s



**AFTER FOUR YEARS
OF ECONOMIC
FAILURES,
GORBACHEV IS
PLEADING FOR HELP
FROM THE PEOPLE. A
HUGE SIGN AT THE
MAY DAY
CELEBRATION
TRUMPETS:
PERESTROIKA
IS SOVIET POWER**

adviser, are preparing reports and calling for U.S.-style public hearings to press efforts to rein in the money supply, control inflation, and free up prices.

Others, led by a group named Fakt, want the Supreme Soviet to abolish restrictions placed last winter on cooperatives, the Soviet equivalent of a private company. "The political reform came just in time," says Nikolai Petrakov, a prominent reformer. "We wanted to fix the economic situation before, but we couldn't. The economic reform cannot go forward without political reform."

There are, of course, political risks for Gorbachev. Some in the Congress already are pressing harder than he may be willing to go. Liberal economist Gavril Popov, for example, has called for a review of Gorbachev's four-year performance. Maverick reformer Boris N. Yeltsin wants multicandidate elections for the presidency. If that were to happen, Yeltsin, who made a stunning comeback in the March elections after his ouster from the Politburo last year, might even put his own name up against Gorbachev.

POLL PURGE. The ferment generated by the Congress will not be limited to the elite. Gorbachev is also turning to Soviet-style democracy to fire up the cynical man and woman on the street. By early next year, Soviet citizens will be asked to head for the polls to elect regional and local legislatures. From Moscow to the tiniest village, the elections will give citizens the chance to reject local party bosses, who often obstruct changes that threaten their own perks.

The aim of these elections is nothing less than to roll back the power of the Communist Party, especially its interference in day-by-day management of industry. Gorbachev wants to return to Lenin's original concept of the party as the "vanguard." It will set standards and guidelines, but won't have the right to make decisions concerning particular factories, shops or farms.

These moves may whip the bureaucrats into shape, but alone they can't reverse the economy's dizzying slide. Gorbachev must follow up with the

government, including the 100-member Council of Ministers and Ryzhkov, must submit their resignations.

In the days of rubber stamp parliaments, this was a charade. The government was immediately reappointed. But this time, Gorbachev is likely to clear out unenthusiastic reformers starting at the top. In short, he may fire his cabinet. Then, delegates to the Congress predict, Gorbachev will bulldoze through the institutions that manage the centrally planned economy. At least half of the 60 industrial ministries are expected to be abolished, with hundreds of thousands of bureaucrats dismissed.

"Gorbachev is doing what any good politician would do. The reform is going badly so he is looking for a scapegoat—the government," says Ed A. Hewett, a Soviet specialist at the Brookings Institution. Such a move would follow directly from his cleanup of the Central Committee in May. Then, Gorbachev ousted 112 old-guard members of the committee, justifying their dismissal with their poor showing in the Mar. 26 elections.

All of this would simply set the stage. The next step will be to let radical reformers take charge. Plenty are gearing up to champion their causes. Economists such as Leonid I. Abalkin, a Gorbachev

TOBER At Iceland summit, Gorbachev's proposal to sharply reduce ballistic missiles. But it's a turning point

DECEMBER Riots break out in Kazakhstan as Moscow cracks down on corruption and replaces regional party leader with Russian. Gorbachev ends Andrei D. Gromyko's exile in Gorky

1987

JANUARY Gorbachev decries inertia in Communist Party, calls for multicandidate elections. *Glasnost* stirs ferment in Eastern Europe. New opposition groups rise in Poland and Hungary
FEBRUARY Gorbachev calls for U.S.-Soviet agreement on elimination of medium-range nuclear missiles in Europe

MARCH Emigration of Soviet Jews rises to 470—highest monthly level since 1981

MAY West German Mathias Rust, 19, lands single-engine plane in Red Square, Gorbachev fires his defense minister

JUNE Gorbachev unveils *perestroika*: radical shifts to financial independence for enterprises, fostering of private businesses

AUGUST Thousands march for independence in Baltic republics of Latvia, Lithuania, and Estonia
NOVEMBER Gorbachev publishes *Perestroika*, writing that Communist parties in Eastern Europe may choose their own directions
DECEMBER At Washington summit, Reagan and Gorbachev sign treaty to eliminate intermediate nuclear missiles

Special Report

MOSCOW SCENES

ROCK, NEWS —EVEN SATIRE

Lights flash. The logo of *Vzglyad*, or *Look*, appears on a large monitor. Then music booms across the set. It's the Soviet Union's hottest TV show, emanating ideas and images that spell *glasnost* with a capital G. Rockers, variety shows, and comedy are regular fare, but it's not just entertainment that makes *Vzglyad* so popular. Interspersed among the light features are serious reports about women's issues, hazardous chemical waste, and government bureaucracy. As many as 120 million viewers nationwide tune in every Friday.

But *Vzglyad* is also proof that *glasnost* has limits. It's



constantly under attack for daring to criticize and for its irreverent style. In mid-May, the show apparently went too far. When a guest commentator questioned why Lenin's body had been displayed in his

tomb on Red Square and not buried, the Communist Party Central Committee erupted. Three weeks later, Aleksandr N. Aksenov, chairman of the State Committee for Television & Radio, was out.

Vzglyad, in fact, is constantly harassed by the party. Special overseers from *Vremya*, or *Time*, the stuffy, official nightly news program, are often on hand, watching for ideological heresy. Aleksandr Sergeyevich Ponomarev, the show's chief censor, says he goes home every Friday night expecting the telephone to ring with complaints.

But the show's youthful producers—average age 30—are developing a finely tuned sense of how to stay just this side of the censors. Not long ago, a segment of *Vzglyad* was broadcast almost exactly as it had been rehearsed in-house. The only omission was a satire by Soviet comedian Gennady Khazanov. Why did the censors yank him? His routine sounded too much like Gorbachev.

By Peter Galuszka in Moscow

shock treatment he has so far avoided: freeing up prices and letting the ruble trade on foreign markets. Only then can the industrial reforms he has launched have some meaning.

Until now, the best Gorbachev's planners have come up with are more of the same policies: top down efforts at macro-economic management. To control the budget deficit and ballooning money supply, Moscow has promised 14% cuts in defense spending and cutbacks in capital investment. In a hollow gesture, the state has ordered factories to produce more consumer goods.

Longer term, economists are working on an antitrust law that could lead to the breakup of giant monopolies, including Aeroflot. The hope is that such a measure could also help create a strata of wholesalers by the mid-1990s and lead to freer retail prices later in the decade.

But radical reformers are urging much stronger actions: selling off state

lands and buildings to absorb the ruble surplus. That would be a huge step, because it would condone large scale private ownership. Gorbachev could devalue the ruble overnight to its realistic value, probably 30¢. He could free up prices on goods such as shoes that are not in short supply now. The most likely scenario, in a few years, is an economy with some prices regulated, some free.

For Gorbachev, the news on the economy is likely to get worse before it gets better. As managers and workers struggle to adjust to the new ways of doing business, growth will crawl along at a 1% to 2% annual pace. That's far from the targets Gorbachev set in 1985 when he spoke of 4% annual growth and taking his country to "new heights."

The question is whether Gorbachev will be forced to write off those goals altogether. While these are dark days for *perestroika*, it is too soon to declare the economic struggle a failure. The So-

viet leader has outmaneuvered his opponents and stunned his critics time and again. Already he has unleashed a process of change in his country that few thought possible.

By Peter Galuszka and Rose Brady in Moscow and Robert J. Dowling in Leningrad, with bureau reports

AT FACTORIES, IT'S DO-IT-OR-DIE TIME

In the back alleys of Soviet cities Russians regularly get taken playing a floating shell game called *igra napyorstok*. Except for the location some factory bosses say that it's not at that much different from dealing with the Moscow bureaucracy. The managers are up against thousands of government officials who have built their careers through political sleight of hand. Some

1985

RUSSIA Soviets announce plans to withdraw all troops from Afghanistan

ARMENIA Armenian nationalists launch protests in Nagorno-Karabakh in Muslim Azerbaijan

MADRID Radical reformer Boris Yeltsin loses Politburo seat after he criticizes Gorbachev for pushing economic reforms too slowly.

Gorbachev calls for new incentives for farmers because agricultural reforms aren't working. More than 100 Soviet dissidents from 20 cities meet to form Democratic Union, an independent political club

MAY At Moscow summit, Reagan calls Gorbachev his "friend"

JUNE At first Party Conference since 1941, Gorbachev wins sup-

port to put limits on decision-making power of Communist Party. Latvian writers call on Moscow to turn their republic into a "sovereign state"

SEPTEMBER Gorbachev's chief conservative rival, Yegor Ligachev, is demoted. President Andrei Gromyko retires

OCTOBER Gorbachev named President. Soviet people learn

their nation has \$58 billion budget deficit and that inflation is a problem. European banks and governments ante up \$10 billion in aid, but Soviets use little of it

DECEMBER At U.N., Gorbachev outlines foreign policy based on interdependence, not capitalist socialist struggle. He pledges to withdraw 50,000 troops from Eastern Europe, cut military

times the managers win, but more often they lose. The decisions that are made affect some 48,000 state-run manufacturing enterprises.

A few years ago, Mikhail S. Gorbachev set out to bust up this system. He decreed that plant managers should have more say in what to pay their workers, how to invest their money, and what products to make. But like many things in the Soviet economy, the order from the top is taking a long time to reach the ranks.

SPECIAL ORDERS. When Gorbachev handed more power to factory managers on Jan. 1, 1988, ministry bureaucrats made a countermove. Using loopholes in a new reform law, they loaded up factories with special state orders for up to 100% of production. Many managers caved in. But a few didn't. One Igor I. Stroganov, the director of Uralmash, a machine tool manufacturer in the city of Sverdlovsk, raised a stink. He returned the order to the Ministry of Heavy Machine Building. Up the ladder it went. Today, Stroganov and the ministry are still locked in battle.

Now Gorbachev has ordered ministries to limit their orders mainly to consumer and defense goods. He also has tried to reduce Moscow's power by transferring 600,000 bureaucrats to factories or institutes. But the bureaucrats are fighting back by merging ministries and renaming them. So far, just six out of Moscow's 60 ministries have been disbanded. If more cuts are to come, Gorbachev may have to enlist the full support of the new radical reformers in the legislature (page 55).

The ministries aren't the only obstacle to reform. Even if Gorbachev shut down every one of them, he would still face the problem of workers. To get more people to believe that working harder means more pay goes against decades of Marxist teaching. "At fault is the psychology of the people, their attitude toward work," says Alexander Nesterov,

MOSCOW SCENES

HALDEMAN HAWKS HIGH TECH

Sporting a tennis-court tan and looking softer than he did 20 years ago, H. R. "Bob" Haldeman, the Watergate conspirator, sips coffee at the U.S. embassy cafeteria in Moscow. Haldeman is here to promote a high-tech office building for the many foreign companies he expects the new Soviet economy to attract.

An Orange County (Calif.) investment group that Haldeman represents wants to erect a 45,000-square-foot tower with plush suites and a satel-



director of Temp, an amalgamation of electronics factories in Moscow.

To win over workers, Gorbachev is now pushing entrepreneurship through leasing. At the Butovo Building-Materials Plant, a failing factory near Moscow that's been leased to workers, employees determine everything: salaries, capital investments, and production plans. The plant's director, Mikhail Bocharov, says productivity and output are up by 30%. The factory has even opened its own outlet store where it sells wooden furniture, and it plans to open two more. "We are counting the money," says the boss.

GUN-SHY. But Butovo is an exception, one of only 600 factories to try the experiment thus far. Most managers are disinclined to take risks. Some lack the training; many others don't care, even though they now can sell their products abroad, set up joint ventures with foreign companies, and contract work out to Soviet-style private enterprises.

In part, they can't be blamed. Soviet industry is woefully backward, and foreign partners are scarce. Walk around a manufacturing plant such as the Vladimir Tractor Factory, one of the country's biggest producers, and you see a handful of computers and machine tools

lite channel for data communications and videoconferencing. In a city where communication relies on prewar telexes and rotary-dial phones, this would be a revolution.

Like so many others, the project is a bet that Mikhail S. Gorbachev's reforms will succeed. But what about Washington hardliners, who not too long ago considered personal computers a sensitive export? "We know for certain," says Haldeman, that the KGB already has whatever technology the building would use. Coming from a former White House Chief of Staff who knows something about bugging, there's a ring of authority in that statement.

fit for a mom-and-pop shop in the U.S. That's the result of years of government decisions to spend big money on petroleum and chemical plants while other key industries, such as machine tools, were starved.

To fix Soviet industry, Gorbachev will ultimately have to enforce his threat to make Soviet factories survive on their own—or go bankrupt. That might take shock treatment, such as sudden price reform or a complete withdrawal of subsidies. But only then will Soviet factory bosses take the ultimate gamble: Either modernize—or lose your job.

A BLIGHT ON THE FRUITED PLAIN

Walk one flight up in the dairy barn at the Schapovo collective farm to the wood-paneled viewing room. Although it's hard to tell by looking through the observation window, there's a competition taking place among the 400 cows below. It's a Soviet milking system vs. an American one. The Americans are winning.

In a nation with 42 million cows, four

es by 500,000 by 1991.
ernment says it will devalue
e by 50% in 1990. Opens
for foreigners to own major
shares in joint ventures. Earth-
ke hits Armenia, killing
000 and setting back reform

JANUARY Economy worsens.
get deficit now estimated to

exceed \$120 billion. Money sup-
ply balloons out of control. State
ministries ordered to cut spend-
ing, base salaries on productivity.
State vodka stores reopen to help
boost revenues with taxes on al-
cohol. Sudden clampdown im-
poses price controls on flourishing
cooperatives, bans co-ops in
medical care, publishing, gem
sales, and education

FEBRUARY Last Soviet troops
leave Afghanistan
MARCH Gorbachev says he'll
lease land and equipment to farm-
ers for 50 years in hopes this rad-
ical step will boost agricultural
output. Boris Yeltsin wins big in
first relatively free election in 70
years. Dozens of old-guard Com-
munist Party leaders defeated
APRIL Five U.S. companies and

a merchant bank sign deal to do
as many as 25 joint ventures. All
Soviet factories given the right to
trade abroad
MAY Gorbachev goes to Beijing
for first Sino-Soviet summit in 30
years. Bush Administration says it
may ease restrictions on Soviet
exports to U.S. Congress of Peo-
ple's Deputies opens in Moscow

DATA: BW, FACTS ON FILE



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MOSCOW SCENES

THE BOXERS ARE COMING!

If you don't count vodka and caviar, the Soviet Union's best-known export may soon be its boxers, tennis stars, and dancers. Adored by Western audiences, some found big bucks by defecting. Now they can do it legally. From Alexander Sitnikov, whose paintings were auctioned at Sotheby's last July for a total of \$18,000, to tennis pro Natalia Zvereva, who grossed \$500,000 last year, Russia's artists and athletes are fast becoming Moscow's nouveaux riches.

Well, sort of. The celebrities are beginning to make headlines with outspoken complaints about how the state is robbing them of their hard-



earned money. In Sitnikov's case, by the time Sotheby's took its 10% of auction proceeds, the Culture Ministry collected its 30%, and the Finance Ministry bit off an additional 30% of the remaining 60%, the artist was left with only about \$7,600.

Author Leonid Bloch has managed to save \$60,000 worth of West German marks with sales of his books to European publishers. But his account in the Soviet Bank for Foreign Economic Affairs, a far cry from the Swiss bank accounts of Europe's glitter-

ati, pays only 2% interest. "If this is not increased in the next two years, I'll put my money in Western banks," he insists.

Athletes are shortchanged, too. Sovintersport, the state booking agency, takes half of their earnings, splitting the money with its parent, Goskomsport. And that can be a big rake-off: Soccer player Alexander Zavarov's contract with Turin's Juventus club is worth \$4.5 million.

While athletes and artists have plenty of reason to gripe, it's likely many more will be lining up to fight, skate, and dance in the West. After all, half a purse is better than none, and worldwide fame and the chance to cash in on commercials is hard to beat. Plus, as the Kremlin's top PR man knows, it works wonders for the Soviet image.

times more than the U.S., Soviet milk doesn't last more than a day. "The American machines give us milk that is 100 times above the standard for Soviet milk," says Nikolai Lasha, Schapovo's head dairyman. The model farm now has a state loan to manufacture parts of the computer-controlled American system with Chicago's Babson Brothers Co., the machines' inventor.

Schapovo is one of 500 to 1,000 model farms that receive special attention. Its ebullient director, Marat M. Bojnovich, talks about building vacation homes and museums, as well as cutting deals with U.S. and British companies. But even here, workers live in aging high rises, the roads are crumbling, and it's hard to keep young people around.

LEASING LAND. Mikhail S. Gorbachev, a former Agriculture Minister, hasn't yet made a dent in the Soviet Union's chronic food shortages. His various new "economic mechanisms" to boost incentives and production haven't caught on in enough places yet to make a difference. The latest idea that isn't spreading: farm leasing. At a special Central Committee meeting in March, Gorbachev pushed a plan to let farm workers lease land and buildings for 50 years—and pass the leases on to their children.

That's a radical proposal in a country where private ownership of land has long been frowned upon. The idea is to encourage farmers to feel that the land is theirs. The trouble is that when Stalin collectivized agriculture in the 1930s, he virtually eliminated the peasant class.

Living in high rises on sprawling complexes, the farmers became more like factory workers. Now few want to take the risk of leasing a farm.

At Schapovo, for example, not a single farmer has taken the plunge. "They are afraid of the responsibility," Bojnovich says. Down the road at the Lenin's Ray collective, just 40 of 1,200 workers are breeding pigs and growing crops for profit. Pig breeder Lidiya S. Simofeyeva likes it because her wages jumped 20%. But Director Gregory Alergant is reluctant to give up control for the long term. "Leasing for a lifetime or 50 years isn't necessary," he says.

SPOILED SPUDS. But boosting incentives on the farm is just a partial solution. Even when the harvest is good, 40% of the crop is wasted because Soviet storage, distribution, and processing facilities are so bad. If the potatoes don't fall off the trucks on the road to Moscow, they rot after months in a giant, central storage bin. And despite plans for joint ventures with such foreign food processors as Archer Daniels Midland Co. and RJR Nabisco Inc., it will take years to build the roads and factories needed.

For Gorbachev, then, agriculture is one story of waste after another. And it's expensive. Billions in price supports are paid to the country's 49,000 state and collective farms each year, even though many are unprofitable. Paradoxically, the Kremlin plans to raise the prices it pays farmers for their produce even higher next year. While it's taking a small, progressive step by freeing up

fruit and vegetable prices, milk still costs just 26¢ a liter, as it has for decades. The price of bread is 15¢ a loaf.

Back in the czars' day, Russia could feed itself. This year, after a poor harvest, the Soviets are importing record levels of American grain. It's a sign of how far they haven't come—and how much more Gorbachev has to do.

WHY IVAN SLEEPS ON HIS SAVINGS

What program trading is to Wall Street, the "ruble overhang" is to the Soviet Union. Few understand it, everyone talks about it, and most agree it's dangerous.

The overhang is spendable rubles—stashed in tin cans, mattresses, small bank accounts, and the safes of black market loan sharks. It's estimated at 30 billion rubles, or nearly \$500 billion at official exchange rates, and it's growing each day.

The danger from the overhang is inflation. If the Soviets were to decontrol prices or allow valuable Western goods to reach the market, it's widely feared this money could break loose like an avalanche and send prices skyrocketing. On the other hand, while there's nothing worth spending rubles on, the overhang keeps piling up.

What to do? Schemes abound for mopping up the rubles. Sell government bonds yielding 9%, instead of the 3% that

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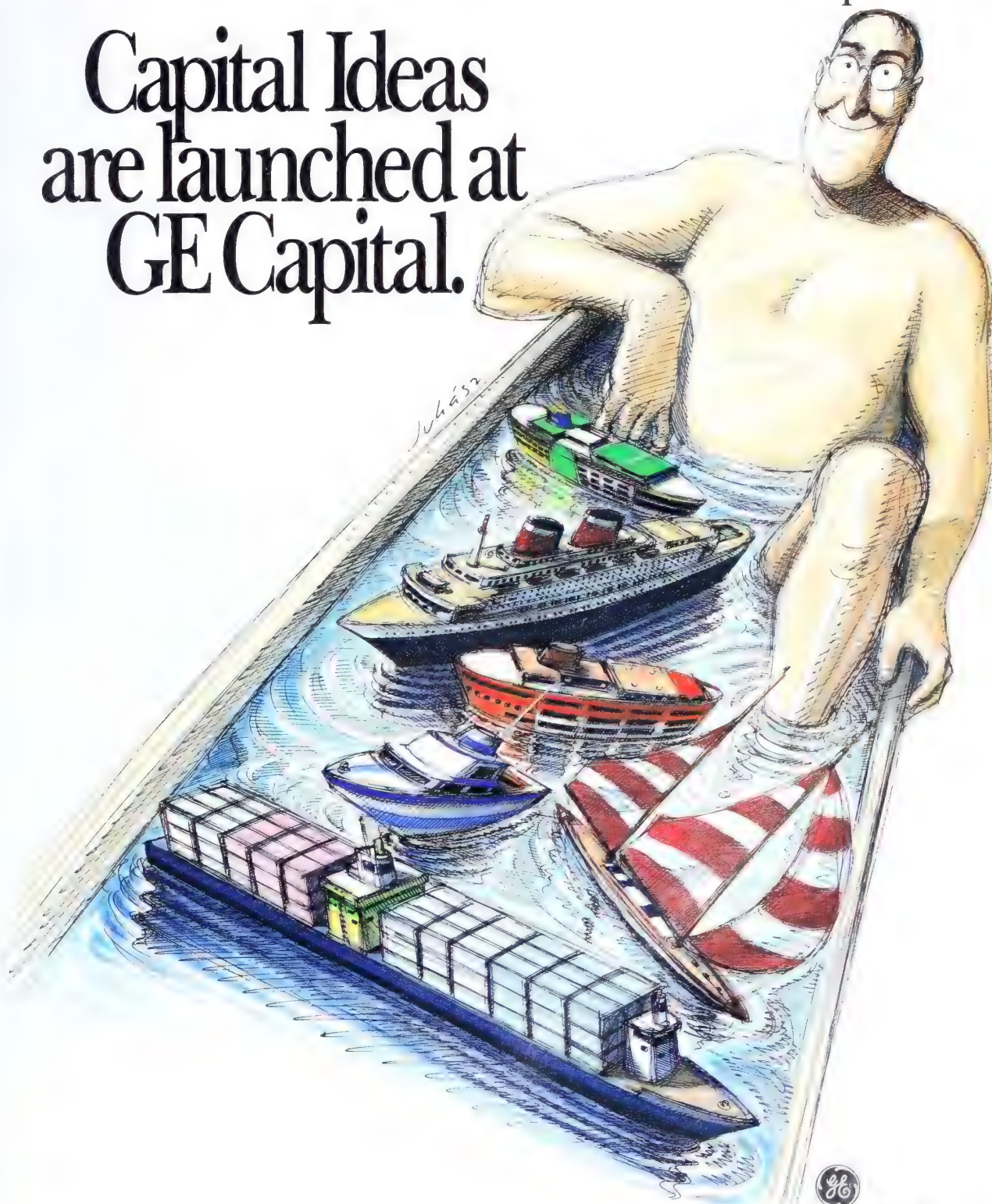
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state banks currently offer. Devalue the money by issuing a new ruble, worth perhaps 30¢ instead of the official \$1.63. Start a commercial banking system offering competitive rates on savings. Force Soviets to prepay for cars several years in advance and hold their deposits in an auto bank.

Some advocate credit cards as a way for people to get acquainted with spending money while not carrying wads of cash. American Express and Visa offer cards in rubles, but only a few state stores take them. One is the giant GUM, the world's largest department store.

Some co-op restaurants also accept plastic. But unless they help buy better goods, which is unlikely soon, credit cards will have limited value. And in the thriving black market, they're useless.

MONEY STORES. The newest idea is for factories to sell shares to their workers. It's already being tried in a few plants. The shares yield 9%. Some plant managers even want to sell them to the general public and begin a stock market. That's a big step because it would remove workers from the means of production. In other words: Capitalism.

Gorbachev's answer is new banks. He

has licensed some 70 that would be independent of Gosbank, the state bank, but few are operating. That's because the Soviet Union has no internal credit market, and it never developed domestic bankers. When the government needs money, it just prints it. With no credit market, there's neither an impact on interest rates nor inflation that's visible.

The famous Russian traders who play the gold and foreign exchange market in London and New York are a class unto themselves and have nothing to do with the primitive finance at home. Soviet banks are money stores, where ac-

A TALK WITH NIKOLAI RYZHKOV, ECONOMIC CZAR

Nikolai Ivanovich Ryzhkov, 59, a moderate in the reform movement, is a leading example of the new kind of efficiency-minded technocrat. As chairman of the Council of Ministers—in effect, Prime Minister—he is Gorbachev's economic czar and is under attack from radicals for being too cautious. From 1959 to 1975, he was on the staff of the giant Uralmash heavy-machinery factory at Sverdlovsk, a city closed to foreigners because of its involvement with military production. Later, he worked at the central planning agency, Gosplan. Yuri Andropov, Gorbachev's mentor, tapped Ryzhkov for the Central Committee of the Communist Party in 1981, and by 1985, he was a full member of the Politburo. On May 19, BUSINESS WEEK's Moscow Bureau Chief Peter Galuszka interviewed Ryzhkov for two hours in a large, ornate conference room in the Kremlin. Among the high points of that interview:

ON U.S.-SOVIET TRADE

I have said that political contacts [between our two countries] have overtaken our economic relations. This is something we can't understand. After all, we are two major powers. We were predestined to cooperate, to maintain trade relations. We believe that your international economic relations are very politicized in contrast to those of other countries.

Take the example of the Jackson-Vanik Amendment. I am not at all sure that if the amendment were now repealed, our trade relations would become much more active. But it would be one step in the right direction. We have to begin to remove those elements of mistrust. The U.S. accounts for about 1% of our external economic relations. The same goes for the Soviet

Union in your trade turnover. For relations between two major countries, this is not serious [trade]. Regrettably, this is the sad reality.

ON PERESTROIKA

If this were a mere cosmetic change, we would not be facing the difficulties we are facing. We are touching on the very heart of the matter. In spite of the difficulties, we believe we are laying a



solid and healthy foundation. Our task will be to build on that foundation.

ON JOINT VENTURES

Two years ago we authorized about 10 ministries and about 100 major plants and factories to maintain independent relations with foreign partners. As of Apr. 1, 1989, all enterprises, without any exceptions, can have trade relations with foreign partners. We intend

to have joint ventures that will incorporate not only trade but marketing, R&D, and design. We're not a backward country. We are a major country with considerable potential, especially in research and development and technological potential, [but] our old system somehow did not allow for rapid implementation of new inventions.

ON SPEEDING UP PERESTROIKA

I believe our economic reform is proceeding normally for a country like ours—an enormous country with 286 million people. I mean it is *Mission Impossible*. It is an unrealistic task to try and change course over a period of one year. We have set the goals. What is not absolutely [clear and] straightforward is our tactics.

ON PRICE REFORM

It is true that we have decided to postpone a reform of prices for two or three years. Reform could lead to social unrest, and this is something that we do not want to face. Of course, you can achieve a balance of the market overnight. What you do is just raise prices—food prices, consumer prices—and you will have a greater amount of commodities, more commodities than money. But that affects the living standards of people, and that we cannot let happen. We have tens of millions of people whose living standards are not sufficient. We believe that they amount to about 15% of the total population, or 43 million people. If we introduce market prices today, the rate of inflation will grow by hundreds of percent. We cannot introduce [price] reform just for the hell of it.

ON COOPERATIVES

We already have 100,000 cooperatives. Our cooperatives produced about 6 bil-

ounts are kept in cashier's desks. Banks have limited appeal anyway. It's rare Soviet who would trust the government enough to allow it to know how much savings he has.

More troubling: No one understands banking in the Western sense. "We can create banks, but we have no bankers," says Victor D. Belkin, a leading Academy of Sciences finance specialist. To build a banking system quickly, he suggests the government needs a large joint-venture program with Western bankers, or it needs to import Western bankers to train Soviets. "Even that might take some years," he says.

A group of five European banks from

ion rubles worth of products last year and in only the first quarter of this year, 4.3 billion rubles of goods and services. Our reform is proceeding in the right direction. But I always thought that the slogan in the *Internationale*, destroy everything... and rebuild, was a wrong slogan. We must not float above reality.

ON PERESTROIKA'S UPS AND DOWNS

Just three years ago, one ministry, the Foreign Trade Ministry, had the right to maintain contacts in the foreign market. Today tens of thousands of enterprises, plants, and factories have that right. This is what I call reform. Private farmers can now lease plots of land for 50 years or even for indefinite periods of time. This is what I will call change. We are proposing now to our farmers that they should enter into leasing arrangements, and some say, "No, thank you, I'm better off the way I am." People have been taught for decades to live the way they are living now.

ON THE SOVIET BUDGET DEFICIT

Our objective [at first] was to provide a healthier financial climate at the level of the individual enterprise. We have improved the financial health of individual factories and plants. We tried to address the problems of the producer. The state, sure enough, wound up with a negative budget. So the full effort that we have made has, paradoxically, turned the tables on us.

ON DISBANDING THE MINISTRIES

The role of the ministries depends on how quick the pace of change is and how quick we see enterprises achieving

Italy, West Germany, France, Austria, and Finland is doing just that. It's setting up the first bank joint venture in Moscow to do commercial lending both in and out of the Soviet Union. It will also help train Soviets in foreign exchange and securities transactions.

NOTHING TO BUY. Parallel with that, Belkin and other advisers to Gorbachev are urging the government to make the ruble at least partially convertible to hard currency by permitting regular auctions of rubles for dollars, West German marks, and perhaps Swiss francs. The plan has strong backing from economists, and the government has had at least one secret auction, where the ru-

independence. If we remove the [ministries'] managerial functions right now, factories and plants will cease to operate. If I were given the right to an experiment in another country, I would readily disband all ministries. But since my home country is involved, I hesitate.

ON THE CONVERSION OF MILITARY PLANTS TO CONSUMER PRODUCTS

We are converting more than 300 defense plants to production of consumer goods. The military-industrial complex does have considerable potential. Conversion requires a certain investment,

but this is within our power. Which assembly lines should continue producing weapons and which should be used to produce civilian production is not really a problem. That we have calculated. The ratio

between military and civilian production at present is 60-40. Now, as conversion proceeds, by the end of 1990, the ratio will be on the order of 50-50. By the end of 1995, I guess that ratio will be 40% military and 60% civilian output.

ON MAKING THE RUBLE CONVERTIBLE

One [way] would be to do it over time based on price reform. A second would be to have two rubles, one backed by hard currency. We are trying to review all possible avenues. I do not place much confidence in this double-track idea. It may breed considerable social tension. I believe that ruble convertibility will depend on how our economy operates and also on our prices and on the availability of goods. This will have to be a gradual process. It will only proceed if we succeed in creating a healthier economy. All the other options [toward convertibility] are somewhat artificial.

ble's value turned out to be not \$1.63, but a mere 9¢.

Whether official ruble convertibility will be tried for some years is a matter of great debate. Anything such as an auction or a double-ruble system, one for Soviet use, one for foreign use, is "artificial," says Soviet Prime Minister Nikolai I. Ryzhkov. Only a good supply of consumer goods will solve the problem.

But in a yellow concrete building off the Volga River, where financial schemes are being drafted, Andrej Kazmin, a young economist, says: "Lenin always knew the importance of a banking system to the Soviet economy. We will have one, too."

ON RELATIONS WITH WESTERN EUROPE

The concept of the common European house is comprehensive, and it comprises political as well as economic elements. As far as the economy is concerned, there is one serious challenge—1992. [It] is a concept to which the Soviet Union and the U.S., too, will have to give much thought. So far as politics is concerned, we believe the focus of attention should be the Vienna negotiations [where conventional arms reductions would be decided]. This is where the fate of the common European home will be decided. The U.S. must play a role in building this common home.

ON A NEW ORDER IN EASTERN EUROPE

For all the good and positive things that [the East Bloc's] Council for Mutual Economic Assistance has yielded, we see a number of fundamental and serious problems that keep cropping up. We are pursuing a flexible policy here regarding politics. Each country is sovereign. We will not interfere. So far as our political alliance is concerned, it will continue as long as NATO does. As soon as NATO is disbanded, the Warsaw Treaty can also cease to exist.

ON THE SOVIET ROLE IN THE WORLD

No country that wants to develop normally and wants to keep abreast of technological, social, and environmental developments can do so without maintaining close international economic relations with others. Our economy was functioning within its own closed circuit as it were. Over the past three years, we have achieved some progress in changing the rules of the game. We are also trying to change the mentality of our people.

ON THE COLD WAR

Basically, I do think the winter of mistrust is over. We do not have that all-encompassing stress that we used to have.



THE CHILL IS GONE, AND U.S. COMPANIES ARE MOSCOW-BOUND

Soviets have sweetened the rules: Now, Westerners can even control top management

The rubles that Western companies earn are essentially worthless. Living and working conditions even in Moscow's four-star hotels can be awful, and under *perestroika* there are more, rather than fewer, bureaucrats to deal with. You easily can be the victim of a scam: After one U.S.-Soviet joint venture paid to have a factory built, the contractor took the money and ran.

Yet more and more American companies are coming to Moscow. Some are as small as the pizza vendor from New Jersey who lasted until he found his rubles wouldn't cover the cost of imported tomatoes, oil, and dough, and went home. Others, such as McDonald's Corp., are investing for the long haul. Its Canadian unit plans to open two restaurants this year and as many as 16 later, setting up greenhouses and a factory to grow and process its own ingredients.

As the number of joint ventures increases, foreign executives tend to dismiss immediate problems and talk about the long view, as they said of China a decade ago (chart). "*Perestroika* can't put in new office buildings within six months. We have not lost faith," says Combustion Engineering Inc. Vice-President Maxwell Asgari. Since Combustion set up the first U.S.-Soviet joint venture in 1987 to sell refinery equipment, its management has been holed up in a Moscow hotel. But the venture has booked \$60 million in orders and will soon build a factory.

NOT LIKELY. Combustion is also negotiating a new venture for two multibillion-dollar petrochemical complexes in Siberia. Talks are going slowly because the company wants full Soviet guarantees to lure financing for the project. That's not likely, Soviet Prime Minister Nikolai I. Ryzhkov told *BUSINESS WEEK*.

"The Soviet government doesn't bear responsibility for such enterprises, and it can't take such responsibility," he says.

Although there are 365 joint ventures already signed with Western companies, only about 50 are up and running, so their impact on the economy is still small. But the Soviets are eager to get the management skills and technology. They also want to use Western companies as a yardstick to measure performance at state enterprises.

U.S. companies got on the bandwagon late—after the West Germans, Finns, Italians, and the British, who had fewer inhibitions about doing business with the Soviets. That's fast changing. Five American multinationals—RJR Nabisco, Eastman Kodak, Archer Daniels Midland, Johnson & Johnson, and Chevron—have formed the American Trade Consortium to negotiate 25 ventures. They

reached a precedent-setting agreement with the Soviets in March that will guarantee payment in hard currency.

Many newcomers are teaming up along industry lines. Fifteen American food companies are joining together to expand trade and promote ventures in food processing. And in mid-May, a group of U.S. health care companies that includes Pfizer, Abbott Laboratories, Hewlett-Packard, HCA International, and Medserv International launched a consortium to create ventures with the Health Ministry and 34 Soviet health care organizations.

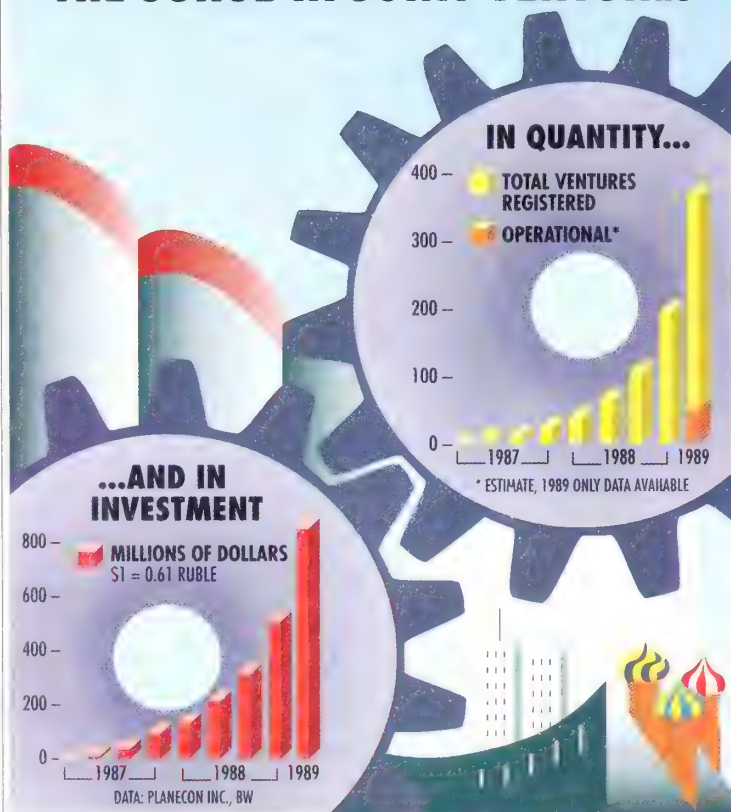
IMPROVEMENT. The Soviets, for their part, are juicing up the joint-venture rules. They now will permit Western companies to own as much as 100% of a company and to control the top management—something unheard of before.

All this signals a broad improvement in the trade climate. Two-way trade between the U.S. and Soviet Union in 1988 jumped 42%, to \$3.5 billion, largely because American grain exports to the Soviets rose markedly. The Bush Administration seems willing to go further. It has offered to waive the Jackson-Vanik Amendment, which links duties on Soviet exports to the treatment of Soviet Jews. This fall, the Administration is expected to ease restrictions on U.S. high-tech exports begun after the Soviets invaded Afghanistan in 1979.

In Moscow, American executives meet each Saturday at the U.S. embassy to talk shop. Lately, they have been handing out awards for the wildest idea of the week. Past winners include proposals for selling vacuum cleaners, popcorn, and even balloons. But then *perestroika* is only four years old.

By Peter Galuszka and Rose Brady in Moscow

THE SURGE IN JOINT VENTURES





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THE PARADOX OF PERESTROIKA: A RAGING BLACK MARKET

Reforms are making the sale of illicit goods more lucrative than ever

Eyes peeled for plainclothes cops, two lookouts dressed in sporty windbreakers scan hordes of Saturday shoppers. In a narrow alley lined with aluminum kiosks, goods of all kinds are going fast at markups of 50%, 100%, even 200% over state stores. The lookouts swing into action as I push my way in to photograph a man hawking a vial of perfume. One shoves a newspaper in front of my camera lens, while the other shouts a warning: "Be careful. You don't know who he is. Could be KGB."

Welcome to Ryzhki Rinok, one of at least 25 illegal outlets in Moscow for black market goods. Can't find blue jeans in the state stores? Buy them here for 150 rubles—about three weeks' pay for the average worker. Want some Beluga caviar? Just ask the guy leaning on his car. Need an AK-47? It can be obtained, perhaps from an Afghan vet. Here, and at other markets in town, you can also shell out 85 rubles for Polish sneakers—or 6,000, two years' pay, for a Japanese videocassette recorder.

When Mikhail S. Gorbachev's *perestroika* can't deliver the goods, the Soviet

Union's *fartsovshiki*—black marketers—can. Four years after Gorbachev began his economic reform campaign and crackdown on corruption, the black market is stronger than ever. Fully 84% of the Soviet population gets the goods they need on the black market, estimates the Soviet economic journal *Eco*. Illegal trade is worth some 150 billion rubles a year—but it may exceed 350 billion, some \$560 billion at official exchange rates. "The black market passes through everyone," says Yuri Shchekoshikin, an investigative reporter for the newspaper *Literaturnaya Gazeta*.

Goods sold at markets such as Ryzhki Rinok are believed to be produced in hundreds of underground factories across the country. Perhaps up to 20 million people earn their living from it.

It's a mindset that says: "If you're doing it illegally, it must be O.K."



In an economy straitjacketed by central planning, *fartsovshiki* can easily make a killing. One example is a black marketer from the republic of Uzbekistan. When he traveled to Moscow, he lived in the style of a Soviet Al Capone with a limousine and eight rooms at a pricey foreigners' hotel.

BRIBES. He supplied wood and sheet metal to individuals and enterprises at prices far above those fixed by the state. To get supplies, he bribed top officials in the state planning and supply agencies and persuaded them to send telexes authorizing deliveries. "He had everything just like the Italian mafia—bodyguards, weapons, his own special communications network," Shchekoshikin says. The black marketer, who ran his illegal business in the late 1970s and early 1980s, was tried and convicted a few years ago.

In the years of Soviet leader Leonid Brezhnev, the authorities turned a blind eye to many such cases. The black market seemed to be officially sanctioned as a way to keep the rigid Soviet economic system moving. But that changed when former KGB chief Yuri Andropov became leader and won support from both reformers and the KGB to root out corruption. Gorbachev, Andropov's protégé



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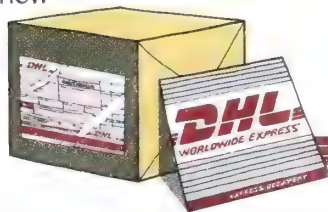
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So whenever you choose an operator services company, remember: size isn't everything. In the end, it's the smarter, quicker guy that prevails. That's how evolution works.



stepped up the campaign. Last year, Yuri Churbanov, Brezhnev's son-in-law, was sentenced to 15 years in prison for taking bribes.

Yet it's plain that Gorbachev's cleanup campaign has backfired. To stop corruption and provide consumer goods, he tried to bring the black market into the open by legalizing small private businesses. In two years, more than 100,000 of the businesses, called cooperatives, have sprouted. They now employ some 2.7 million, or 2.1% of the labor force.

But the co-ops haven't become substitutes for the black market. In fact, they are regularly accused of spawning crime. Some are believed to launder black market funds. Others, if they are successful, provide gangsters with cash-laden targets for extortion or robbery.

Indeed, violent crime is on the rise. In 1987 and 1988, armed robbery went up nationwide by 42.8%. For the first four months of this year alone, violent crime rose 40%. Many blame Gorbachev's reform efforts. They maintain that by freeing debate through *glasnost* and encouraging political activity, Gorbachev is breaking down the social order that gave Soviets few choices but did keep violent crime in check.

Moreover, there's a paradox in the attitude of many Soviets toward cooperatives. People often express anger at cooperatives that charge high prices or envy at owners who make high salaries. Yet, Soviets hardly think twice about paying higher prices on the black market. It's a mindset that says: "If you're doing it illegally, it must be O. K."

A RUSE. Even more subversive is the outright sabotage black marketers may be wreaking on Gorbachev's reforms. Soviets believe that *fartsovshiki* and state officials who fear the destruction of their businesses are the cause of shortages in the state stores. What's really happening, they think, is that state officials and black marketers collude to prevent goods from reaching the shelves.

Citizens of the Caucasian city of Grozny were mystified recently when soap miraculously appeared in large quantities in state stores the moment rationing was introduced. Up to then, it couldn't be found. Apparently, soap had been available all along but had been secretly stockpiled in local warehouses.

The 1964 downfall of another reformer, Nikita Khrushchev, was at least partly brought about by similar sabotage. Such a fate seems unlikely for Gorbachev, but it's scant consolation to know that *perestroika*'s biggest unintended result so far is the booming underground. Now, if only the legal economy could do so well.

By Peter Galuszka in Moscow

FAR EAST

WILL GORBACHEV TEAM UP WITH JAPAN AND KOREA?

He needs their aid to develop the Soviet Far East

Fly seven time zones from Moscow, and you are in the Soviet Far East, where the faces that stand out on the street are Chinese. In the city of Khabarovsk, 35 miles from China's border, the Chinese live in hostels and work at the local diesel-engine factory or on the farm. They're here because most Russians won't come to this barren region that's bigger than Western Europe.

Yet this is an area rich in timber, oil, coal, and fish that Mikhail S. Gorbachev would love to develop. A start has been made. The port of Vladivostok, which has long been closed to foreigners because the Soviet fleet is based here, is being developed for commercial trade. But for a major expansion of the economy, Gorbachev needs help from Japan, South Korea, and the other Pacific industrial powers. He especially needs their money and technology.

Such an agreement would open the door for the cash-rich Japanese Export Import Bank to offer credits and guarantees for deals in the Far East. Four of seven existing joint ventures in the region involve Japanese timber and fishery companies, and there's room for more.

ENTICEMENTS. The Koreans may also be interested. Hyundai Group may build a power plant 200 miles east of Khabarovsk. But there are political problems, too: Korea is unlikely to back big investments unless the Soviets help its efforts to improve relations with North Korea.

Meanwhile, Gorbachev must entice more Russians to the region, where temperatures dip as low as -30F. Local factories and farm officials have gone on recruitment trips to European Russia to coax workers to move. Soviets who do take the plunge earn at least 20% higher salaries. But only about 500 families



VLADIVOSTOK:
LONG CLOSED TO
FOREIGNERS, THE
HOME OF THE
SOVIET PACIFIC
FLEET IS NOW BEING
DEVELOPED FOR
COMMERCIAL TRADE

The big obstacle to getting the aid is politics. Japan's problem is over four islands in the Kurile chain, which the Soviets took at the end of World War II. Now the Russians may be moving toward a compromise on the islands. Soviet officials met their counterparts in Tokyo in March to discuss the dispute, and some Tokyo observers say the Soviets may consider handing back the islands in stages. Others, such as Hisao Kanamori, chairman of the Japan Center for Economic Research, believe the Soviets could sign an economic cooperation pact with Japan by next year.

come each year, says Anatoly K. Bronnikov, a local newspaper editor.

Fifteen years ago, there was a similar thrust for development that failed. But Gorbachev wasn't in charge then, and the need for better relations with the high-tech powers of Asia wasn't as critical. "We were not satisfied with what happened in the 1970s," says economist Pavel A. Minakir. Now the citizens of Khabarovsk are wondering if Gorbachev's special charm and salesmanship can improve that result.

By Peter Galuszka in Khabarovsk, with bureau reports

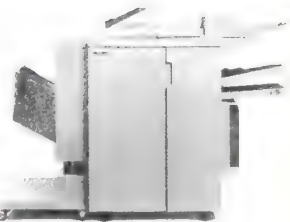
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GLASNOST'S TWIN CRUCIBLES

Poland and Hungary are laboratories for freer markets

Asquad of Hungarian soldiers descended on the Austrian border one day in early May. Their mission: to clip away the 160 miles of barbed wire fence that symbolizes Hungary's Iron Curtain. To the north, Poland's newly legalized Solidarity and other rebels hit the streets, this time to campaign for the first relatively free elections in more than 40 years.

As in a half-finished mosaic, the outlines of democratic societies and market economies are starting to emerge in part of Eastern Europe. From the wreckage of failed Marxist systems, reformers across the bloc are struggling to piece together a freer and more productive order. Some Western ideas about pluralism and free enterprise are also taking root.

WESTWARD WIND. Western Europe and the U.S. have a tremendous stake in the outcome. Poland and Hungary are the first Communist countries ever to throw off, even partly, the party's political monopoly. And their shift toward freer markets is turning them decisively Westward for trade, technology, and investment. Would-be reformers throughout the bloc are taking notes. Eventually, a number of Warsaw Pact nations will hope for closer ties with the European Community, as well as wads of cash to help them survive what is promising to be a wrenching transition.

Take Poland's drive to sell off its state industries. "Privatization can only work through cooperation from abroad," says Józef Czyrek, a member of the Polish politburo. "We have no private capital." But officials in Washington, like the American and European bankers who lent heavily to Eastern Europe's Communist regimes in the past, insist that large-scale lending and credits will have to be earned with continued dollops of liberalization.

If the money isn't forthcoming, the risk that reforms will stall is great, and nascent movements to liberalize other East Bloc nations could get snuffed out. The West Germans are pushing political loans. "We have to think within the [Western] alliance about cooperating with these countries," explains Horst Teltschik, West German Chancellor Helmut Kohl's adviser on the Soviet Union and Eastern Europe. "The reform movements in Poland and Hungary cannot survive without it."

RIVAL CAMPS. With huge foreign debts and economies wasted through decades of mismanagement, reforms could take years. But even a little progress could open the prospect of a radically changed economic and political map in Europe. So far *perestroika* and *glasnost* have split the East Bloc into rival camps: reformers in Hungary and Poland against stand-patters in East Germany, Czechoslovakia, Bulgaria, and Romania.

However, even in the most recalcitrant states, aging leaders will have little choice but to turn to reform eventually because the alternative is "a bleak future of poverty and dependence," says George Schopflin, an East European specialist at the London School of Economics. Food shortages and debt levels are increasing in Bulgaria and Czechoslovakia. In East Germany, which has the strongest economy in the East Bloc, growth has slowed to less than 1%, and exports have slumped, despite roughly \$4 billion worth of aid every year from the West Germans.

Still the old guard won't give up easily—at least not until social instability forces them out. "There is a real fear among party leaders that they will be hung by their necks from lampposts," says Dieter Bingen, a specialist on Poland at Cologne's Federal Institute for East European & International Studies.

The old guard won't give up easily—at least not until rising political pressures push them out



In Hungary and Poland, party official face double jeopardy: They are caught between the hazards of introducing reforms too slowly and losing control of the process altogether. "Civil war is no out of the question," says a Hungarian economist.

'ABSOLUTELY IRREVERSIBLE.' The billion ruble question is: Would Soviet President Mikhail S. Gorbachev then mobilize troops, after already pulling 5% of the Soviet army out, or would he stand by and let the Warsaw Pact alliance crumble? Gorbachev probably does not know himself. Turbulence in Eastern Europe could rock his already shaky support at home, but if he intervened, his plan for building a "common European house" would sound like so much hollow rhetoric.

Indeed, Gorbachev is counting on *glasnost* working for him in East Europe. If reforms are successful there, they will provide the cornerstone for a more integrated Europe, East and West, including expanded trade and political representation in the European Parliament. Plans for high-speed rail and road connection



SOVIET SOLDIERS IN
EAST GERMANY: IF
EAST EUROPEAN
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DISOLVE

between Hungary and Austria are already under way, and much more could come. "The reforms are absolutely irreversible," insists Poland's Czyrek. It will be years, though, before anyone can count the results. For now, the signal from Moscow seems to be "go."

By Gail E. Schares in Warsaw

HUNGARY: MUCH DONE, MUCH TO DO

In fluorescent green letters, the secretary's T-shirt at Communist Party headquarters in Budapest spells out the lyrics of Bobby McFerrin's hit single, *Don't Worry, Be Happy*. The line captures the mood that has seized Hungary in the spring of 1989. Euphoric and half-fearful, Hungarians lurch closer each day to scrapping their failed Communist system and constructing the underpinnings of a Western society. "Everything is open," says Communist Party Central Committee member Géza Kötai.

Since May, 1988, when reformers deposed 32-year Communist Party General Secretary János Kádár, Hungary has carried out the most far-reaching political and economic changes ever in Eastern Europe. Reformers in the government are working to diminish ties with the East Bloc and in the long run seek the status of a neutral country much like Sweden or Austria. "Neutrality is a realistic goal," says Tamás Bácskai, former chief of the National Bank of Hungary. Maybe. But Hungary is only halfway there, and the hardest part is yet to come.

To take the next great leap, Communist Party reformers may even have to split with the existing party, creating the first fissure in official Communism between Stalinist and reformer camps. They will also have to forge a coalition with opposition groups. What's more, Hungary's party leaders, divided as they are at the top, face the prospect of strikes and social unrest as they slash subsidies, shut down sprawling factories, and deregulate prices.

To deflect rising opposition to the re-

gime, Communist Party chief Károly Grósz has made a series of astonishing political concessions. Party reformers led by Imre Poszgay pushed Grósz to accept a multiparty political system, independent trade unions, and a new constitution that no longer reserves a leading role for the Communist Party. "Events have speeded up faster than anyone imagined," says Kötai.

But for Hungary's poor, who make up a quarter of the population of 15.2 million, events can't move fast enough. Ten minutes from downtown Budapest, in a district that housed ministers and diplomats before the war, once-elegant buildings show 40 years of neglect. Many residents live without running water, "month to month, spending all our money on food," says Tamás Tiborne, an accountant for a retail store.

NATIVE JEANS. Eager for help from the West, Hungary is vigorously promoting private enterprise. Despite a shortage of capital, the bare-bones structure of a market economy—from private banks to a fledgling stock market—is now in place, and 150 companies have trans-



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ARE HELPING TO
PRIVATIZE
HUNGARIAN
BUSINESSES,
PROGRESS IS BEING
HAMPERED BY
PARTY HACKS
FEARFUL FOR
THEIR JOBS

formed themselves into stock companies. New laws on foreign investment that took effect on Jan. 1 permit 100% foreign ownership and give equal rights to private business.

Last fall, Levi Strauss & Co. invested \$1 million for a majority share in a joint venture to produce denim jeans and jackets in Kiskunhalas, 70 miles south of Budapest. Now it's looking to set up plants in Poland, Czechoslovakia, and the Soviet Union. The biggest industrial joint venture is a \$115 million glass factory, to be set up by Guardian Industries Corp. with local partners. Accountants Ernst & Whinney recently joined with Budapest's Bonitas to provide accounting and business consulting, and United Parcel Service is looking at prospects.

Hungarians are also reviving education programs for financial and management skills. New schools in Budapest teach everything from marketing to monetary policy, while the government is offering university graduates low-interest loans to start their own businesses. The stock market expects to have 100 companies, traded by yearend, and the London Stock Exchange is coming to install an electronic-trading system.

The rebirth of capital markets is luring foreign investors, too. Creditanstalt, Austria's biggest bank, and the privatized Budapest Bank have signed a 50-50

joint venture with nearly \$1 million in capital to set up Eastern Europe's first brokerage house. And New York's Bear, Stearns & Co. is establishing a Hungarian stock fund.

As part of a privatization drive, Foreign Trade Minister Tamás Beck set off through Western Europe this February hawking a portfolio of Hungary's 50 largest companies to potential Western corporate buyers. For decades, management jobs at state-owned companies have been the domain of party hacks, who may now get axed. "Foreign investors have shown interest in a number of state-owned companies, but they want management kicked out overnight," says Laszlo Antal, a top government adviser. Officials say they will step up pressure for change by cutting total subsidies 50%, or \$3.8 billion over the next three years, and by adopting laws that will force unions to accept privatization.

STALLED LAYOFFS. One successful effort put 49% of the shares of Budapest's Tungsram Ltd., a \$200 million manufacturer of products from lamps to robot controls, in the hands of a Western group led by Austria's Girozentrale bank. To halt money-losing operations, Tungsram laid off 28% of its work force. But despite the government's tough talk about shutting down factories, layoffs in 1988 totaled only 9,035 instead of the

planned 40,000. And up to now the pace of privatization has been slow, with the state budget still accounting for 65% of gross national product. The government has been reluctant to risk strikes, at least until it wins a new mandate in the 1990 elections.

Of all the East Bloc countries, Hungary stands the best chance of reforming its way to political pluralism and freer markets. But time is running short. If change stalls, it could slide into crisis like its neighbor Poland. That haunting vision may just spur the country into high gear.

By Gail E. Schares in Budapest

POLAND: PAIN, BUT LITTLE GAIN

Hubert Janiszewski's dimly lit office in downtown Warsaw doesn't inspire confidence in Poland's economic revival. From worn floorboards to furniture even the Salvation Army would reject, the drabness seems to mock his title as vice-president of Poland's Foreign Investment Agency. Says a dispirited looking Janiszewski: "I obviously can't receive the head of a multinational company here."

The Poles have new laws making it



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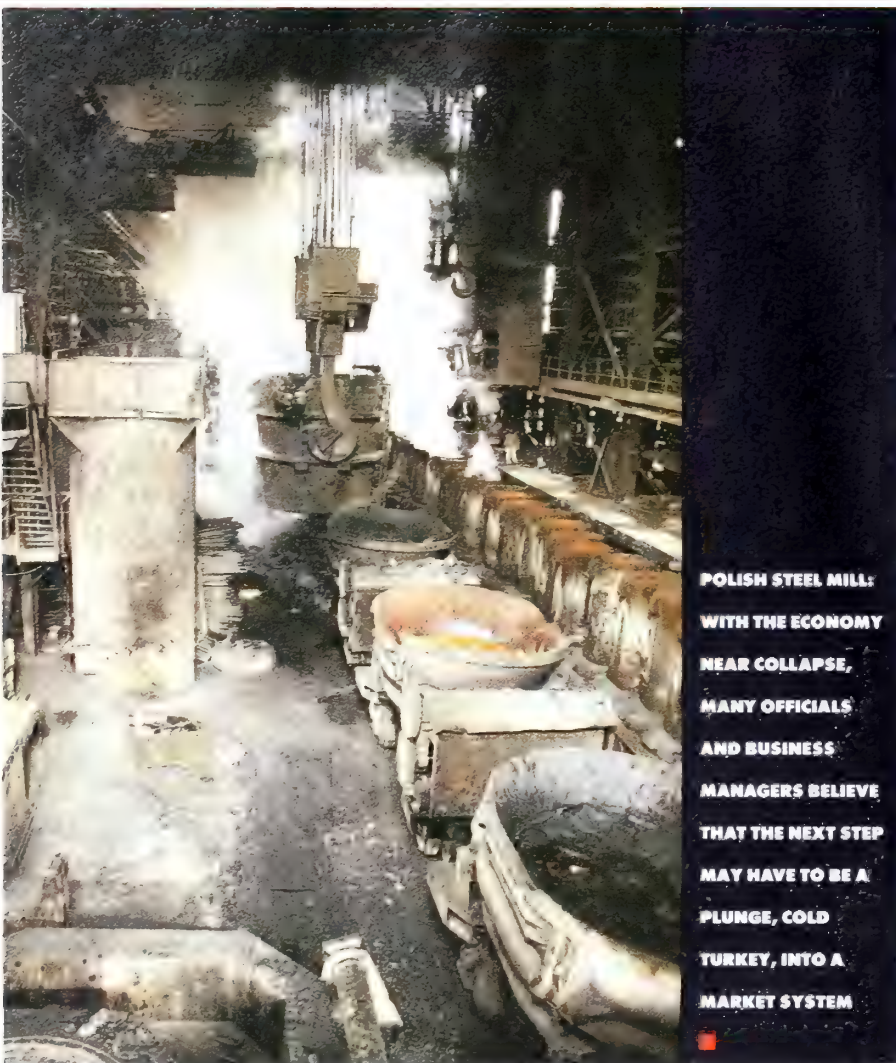
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**POLISH STEEL MILL:
WITH THE ECONOMY
NEAR COLLAPSE,
MANY OFFICIALS
AND BUSINESS
MANAGERS BELIEVE
THAT THE NEXT STEP
MAY HAVE TO BE A
PLUNGE, COLD
TURKEY, INTO A
MARKET SYSTEM**

easier to invest, but there's little new money coming into Eastern Europe's sickest economy. And no wonder. Solidarity is now legal, and elections are on the way, but Poland's ills include a \$39 billion foreign debt, inflation that could hit 200% this year, and industry that relies on 100-year-old technology to get its work done. A few joint ventures may help, but they're not the answer.

"The economic situation is desperate, and it's getting worse," says Anthony Polonsky, a Poland specialist at the London School of Economics. Both opposition and government officials have issued pleas to the West to help shore up the economy and support the trend toward pluralism. West Germany and the U.S. have been tentatively receptive—President George Bush has proposed up to \$1 billion in debt relief and credits contingent on successful economic reforms. But private bankers and corporate chiefs are steering clear so far. Says Deutsche Bank board member Georg Krupp: "The Poles must pull themselves up by their own bootstraps."

The Polish government can do little to reform the economy until it builds bridges to the opposition. Elections set for June 4 could help. Although the Communist Party is guaranteed two-thirds control of the Sejm, or lower house of parliament, the contest now under way for the Senate, or upper house, is the closest thing to a political free-for-all that the Soviet bloc has seen. But neither Warsaw officials nor opposition leaders have much sense about what to do with the economy. "The government is relying too heavily on private business" to solve the nation's problems, says Warsaw University economist Artur Bodnar.

UNION WOES. After so many years in the wilderness, Solidarity is still preoccupied with dismantling the Communist Party's power and isn't much disposed to designing a new economic plan. "I'm not working with the system—I'm working for the liquidation of the system," says Jacek Kuroń, an opposition leader who spent nine years in prison and is now running for the Sejm.

With the economy near collapse, many officials and business managers believe that the next step may have to be to plunge, cold turkey, into a market system in which central control ends. That, of course, means chaos. "The weaker will go down, and the stronger will get stronger," says Jerzy Piotrowski, general manager at Polkolor, a picture-tube plant outside Warsaw.

It is hardly the way Solidarity and the official trade unions want to go. "You can't junk an economy overnight," says economist Andrzej Topiński, a Solidarity representative. A sudden transition to a free market could send food prices soaring 300%. Warns Kuroń: "That would mean riots."

But the unions are going to face a squeeze anyway. The government plans to close 150 money-losing factories and coal mines this year, and even part of the Gdansk shipyard, where Solidarity was born, is being leased to a private entrepreneur who vows to employ non-union labor. The government also wants to cut subsidies, which amount to \$170 million for milk alone—roughly equal to Poland's total defense spending. If that became a trend, economists estimate 10% of Poland's enterprises would fail immediately.

RED TAPE. To make such economic shocks tolerable, the government has to put more goods on the shelves. Some may be better off earning their living as traders and dealmakers than working for the state. There's a thriving business, for instance, in taking advantage of goods shortages. Dozens of trading companies have sprung up to buy computer equipment in the Far East and sell it at a 100% markup to state enterprises too hamstrung by bureaucracy to import it for themselves.

But private businesses are still hobbled, despite new laws promising equal treatment. "State-owned companies receive materials easier, and the bureaucrats are against private companies," says Grzegorz Lindemann, an electronics engineer who 18 months ago founded a computer business called Logic. Lindemann battled the bureaucrats for months just to set up a hard-currency account.

Even so, a pocket of successful entrepreneurs can't reverse Poland's economic slide. So far, West Germany appears to be the only country preparing to offer substantial aid. What's happening in Poland is a historic change, and the June 4 election may help persuade other Western democracies to help as well. If Eastern Europe's sickest country can show life, the prospects for the rest of the bloc may be all that much brighter.

By Gail E. Schares in Warsaw



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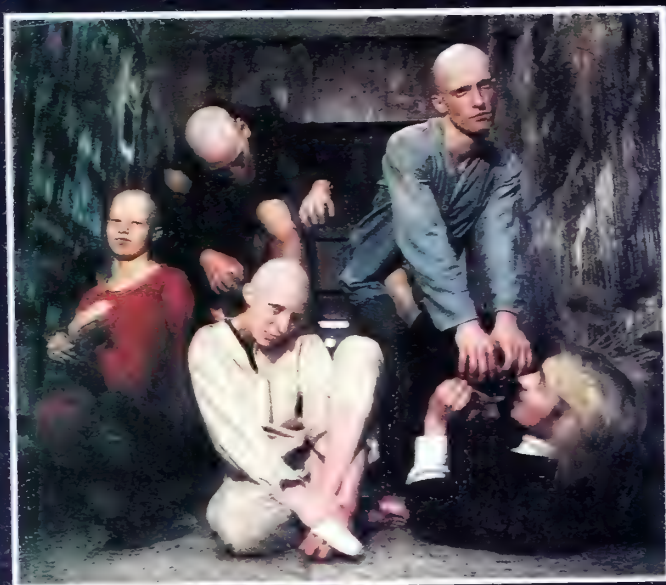
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THE SAME BUT DIFFERENT

For three weeks in early spring, San Francisco photo-journalist Ed Kashi traveled through Gorbachev's Russia capturing strangely familiar scenes. "The official face can be quite rude, but I attribute that to the hard living there," Kashi says. "The private face is extremely warm, intelligent, and funny. So many times, on the street or in somebody's kitchen, I would say to myself, 'This is so much like home.'"



MOSCOW, ON THE HUDSON
(CLOCKWISE): THESE
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WOULD HAVE NO TROUBLE
FITTING INTO NEW YORK'S
DOWNTOWN SCENE. THE
FAMILY GATHERED FOR A
MEAL IN A CRAMPED MOSCOW
APARTMENT, COMPLETE WITH
PRIZED COMPUTER, HAS THE

JUST-SCRAPING-BY LOOK
OF A POOR, URBAN AMERICAN
HOUSEHOLD—ONLY THE
FATHER IS A PHYSICIST. AND
THE YOUNG ACTOR IN HIS
FLAT AND LENINGRAD BAKERS
SHARE AN INTENSITY OF
CRAFT—AND THE MELLOW
LOOK OF HARD LIVING.



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Commentary/by Bill Javetski and John Pearson

THE WORLD IS WAITING FOR BUSH TO LEAD

The Soviets are "singing out of our hymnbook," Secretary of State James A. Baker III said recently. "They are in fact coming forward and trying to emulate us." So are the Poles and Hungarians. And so, in different ways, are the embattled government and the rebellious students in Beijing.

The awesome upheaval under way in the communist world is the response by leaders and citizens to the recognition that Marxism has failed. To spur their stagnant economies and head off political explosions, communist regimes are cautiously adopting some of the practices of democracy, individual liberty, and market freedom that give vitality to the industrial West. In the Soviet Union, President Mikhail S. Gorbachev spearheads these moves, while in Poland, workers led by the independent union Solidarity have forced a reluctant government to accept reforms. In China, embattled leaders pledge to continue the shift toward freer markets they began nearly a decade ago, while defiant students, some wearing emblems of U.S. universities, fill Tiananmen Square with calls for democracy.

SELF-CONGRATULATION. What this turmoil means, President Bush and his Administration correctly conclude, is that the West has won the Cold War politically, economically, and ideologically. The U.S.-led policy of military and political containment of the Soviet Union for 40 years has halted and even reversed Moscow's expansion, as shown by the Soviet pullout from Afghanistan and the troop withdrawal by Cuba, a Soviet client, from Angola. And reformers in communist countries are now taking as models the political institutions and economic systems of the industrial democracies.

However, this triumph of Western institutions and values has to be more than an occasion for self-congratulation. It is an historic opportunity to wind down the military standoff between NATO and the Warsaw Pact in Europe—the front line in the Cold War—and curb the nuclear arms race between the U.S. and the Soviet Union. Beyond that, it offers the challenge of building more stable, less threatening East-West relations by greatly expanding trade and other ties.

What is worrisome is that President Bush and his Administration show little readiness to seize this opportunity. Bush needs to enlist allies in a bold strategy

for structuring a new order, starting in Europe. The best forum for launching such a design would be NATO's 40th-anniversary meeting on May 29-30 in Brussels. For starters, Bush should urge NATO allies to push for a conventional arms-reduction pact with Moscow to lower military tensions in Europe, taking Gorbachev up on his offer to make drastic cuts in Warsaw Pact troops and weapons as the basis for negotiations. That is far more important than the current dispute between Washington and Bonn over whether to negotiate reductions in short-range nuclear missiles in Central Europe.

MORE HOOPS. Bush should also propose concrete steps to achieve the goal he announced in a May 12 speech: the "integration of the Soviet Union into the community of nations." Gorbachev has laid the basis for such participation with reforms that make the Soviet economy and society more compatible with those of the West. But the Administration has responded to these changes largely by insisting that Gorbachev do even more to qualify for admission to the global club—in effect, setting up yet more hoops for him to jump through. "We're in our fifth year of Gorbachev, and we keep saying there isn't enough there yet," observes Ed A. Hewett, a Soviet specialist at the Brookings Institution.

Bush has made it clear that the Administration will not support Moscow's bid for observer status in international institutions such as the International Monetary Fund (IMF), World Bank, and General Agreement on Tariffs & Trade (GATT). But instead of flatly rejecting Soviet membership, the U.S. should offer the prospect of affiliation with such institutions as a challenge to Gorbachev to make further reforms. Michael Mandelbaum, director of East-West studies at the Council on Foreign Relations, points out that such links between the Soviet and international economies would ensure a more predictable, cooperative Soviet Union.

Underlying the Administration's approach, despite Bush's May 12 declaration, is a persistent strain of Cold War thinking. "Our feeling is that Gorbachev is at the point of desperation," says a senior State Dept. official. "If we just stand pat, some concessions will fall into our lap."

More serious is a basic Administration

timidity masked by occasional slaps at Moscow, such as White House Press Secretary Marlin Fitzwater's reference to Gorbachev as a "drugstore cowboy." Such rebuffs betray Washington's worry that Gorbachev is capturing the political initiative by making concrete proposals on arms control and other issues, while the U.S. has few creative ideas to offer.

After months of Administration delay, the U.S. and the Soviet Union on June 19 will resume Start talks aimed at reducing strategic nuclear weapons. But Bush appears reluctant to engage Gorbachev in a dialogue on a broader range of issues, partly for fear of angering U.S. conservatives. Curiously, Bush also seems to lack confidence in the ability of the U.S. and its allies to win favorable terms despite the Administration's belief that Gorbachev is negotiating from weakness. The reason the U.S. opposes talks on short-range missiles, for example, is the Administration's fear that such negotiations would lead to the complete dismantling of U.S. missiles in Germany.



In fact, communism's failure leaves the U.S. and its European allies holding the strong cards in the effort to shape new East-West relationships to end the Cold War. But the West's bargaining power will erode if Bush fails to take the lead in negotiating the terms of a new order.

By contrast with the Soviet Union, China has already won membership, with U.S. support, in international institutions such as the IMF and World Bank, and it has applied for membership in GATT. China's economic reform process has been under way long enough so that it seems unlikely to be permanently reversed, although it could be slowed or halted by the political conflicts that student protests have triggered.

'UMBILICAL CORD.' The broad ties China has developed with the U.S.—officially, and across a spectrum of private activities from business to education—also look durable because they have provided China's principal channel for modernization in the past 10 years. "The U.S. is an umbilical cord for China to the future," says Roderick MacFarquhar, a China specialist at Harvard University. "The Chinese will do a great deal to accommodate the U.S."

More than in the Cultural Revolution or any previous upheaval, the outcome of the present turmoil will be strongly influenced by the impact of ideas and val-

★
'Our feeling is that
Gorbachev is at the point
of desperation,' says a
State Dept. official
☘

ues from the rest of the world on a country that has been self-contained for millennia. "China is now part of the cosmopolitan world culture," MacFarquhar says. Major carriers of the outside influence are the Chinese students who have flocked abroad in the past few years. Currently, 40,000 Chinese are studying in the U.S., and 10,000 have gone back to China. Through this training, "the U.S. will have a huge impact on two generations of Chinese leaders," says David Zweig, a China specialist at Tufts University.

Administration officials such as Defense Secretary Richard B. Cheney profess no such confidence in the Soviet Union's future course. They warn that Gorbachev could be replaced by Soviet leaders who would reverse his reforms and renew Soviet aggression. And while some U.S. opponents of improved relations with Moscow doubt that Gorbachev will succeed in his reforms, others are

worried that he will. The reforms would restore the Soviet economy's capacity to support strong military forces, they fear, and then the country will turn aggressive again. What this scenario ignores, however, is the profound and, in many ways, irreversible changes in Soviet society and politics that Gorbachev has set in motion. "We ought to make it clear that we are on the side of reform, and that we don't fear a stronger, richer Soviet Union," Mandelbaum says, "as long as it is a reformed Soviet Union."

Soviet behavior is also being shaped by Moscow's growing role in an array of international organizations such as the 35-nation Conference on Security & Cooperation in Europe (CSCE). Last January, the CSCE ended a 26-month conference in Vienna to review compliance with the 1975 Helsinki Accords, which had spotlighted Soviet human-rights violations (BW—Jan. 30).

TIT FOR TAT. Gorbachev has greatly reduced such abuses, but now he will be under pressure to do even better. The Soviets signed new human-rights commitments at Vienna to win the West's agreement to hold the next CSCE meeting in Moscow in 1991. "You can be sure that 1990 and 1991 will be very good years in the Soviet Union in terms of human rights," says Edgar M. Bronfman, chairman of Seagram Co. and president of the World Jewish Congress, who has held high-level talks with the Soviets on Jewish emigration. "They aren't going to give anyone an excuse to turn that conference off."

Gorbachev has been calling for greater unity of Europe, East and West, in what he calls the Common European House. Bush Administration officials bristle at the idea, seeing it as a scheme to exclude the U.S. from Europe. In fact, there is no way the U.S. can be kept out, unless it excludes itself by getting embroiled in a protectionist tit for tat with the EC.

West Europeans, by contrast, see economic integration as another way to stabilize East-West relations—and spur Moscow's shift to a market system that can connect with the EC's industrial powerhouse. Mandelbaum says relations with East Europe should be taken up at the Western Economic Summit in Paris next July. The summit "should come out with some general principles for East-West economic interaction," he says, "and they should not exclude the Soviet Union."

This is certainly the moment to move toward such economic interaction. Seizing the opportunity now could create the Common European House on the West's terms. That would indeed be a way, in Baker's words, for Moscow to sing out of the West's hymnbook.

**T-SHIRTS FOR
PEACE: IN THE U.S.,
AS IN EUROPE,
THE DESIRE TO
REDUCE TENSIONS
IS PUTTING
PRESSURE
ON THE BUSH
ADMINISTRATION
TO RESPOND
MORE ACTIVELY
TO GORBACHEV'S
INITIATIVES**

STRETCHED THIN

STRAPPED FOR CASH, STATES FACE TOUGH CHOICES

The nation's governors ought to be a happy bunch. With a few notable exceptions, state budgets are balanced or in the black, income-tax revenues are running well above projections, and overall spending this year will be up by a healthy 8%. But most governors are finding this spring's budget season especially frustrating. That's because they are being squeezed between pressure to hold the line on taxes and a rising clamor for more services.

The result is a noisy debate over budget priorities that promises to grow even louder. President Bush is raising public expectations about a host of social problems, from drugs to pollution to education. But his no-tax pledge means that the states can't look to Washington for financial help. "We're getting a kinder and gentler shaft," grouses Frank Shafron, chief lobbyist for the National League of Cities.

FEUD. At the moment, only a few states are in real trouble. In the early 1980s, the hardest-hit region was the industrial Midwest. As the Rust Belt recovered, red ink flowed to the oil patch. Now, it's flooding the Northeast.

Governor Michael S. Dukakis of Massachusetts assumed that the miraculous growth spurred on

by the state's high-tech industries would go on forever. When the expansion slowed, revenue growth collapsed, and the state sank into budgetary chaos. That triggered an ugly feud with the legislature over how to eliminate a \$250 million deficit. The governor is exploring options that include a capital-gains tax hike. Meanwhile, the state government is paralyzed. "I've never

seen anything like it," says Richard Manley, who heads up the Massachusetts Taxpayers Foundation. "It's an embarrassment."

In New York, Governor Mario M. Cuomo and the state legislature finally broke their own year-long budget gridlock with a combination of modest spending restraint and \$1 billion in higher fees and taxes—including a novel levy on debt-financed corporate buyouts. There was also a dose of blue smoke and mirrors: The state, for instance, switched to a two-year auto registration system, effectively allowing it to claim some of next year's fees in this year's budget.

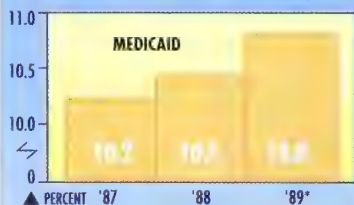
Revenue options are far more limited for Connecticut, which has no state personal income tax. So, faced with a \$158 million deficit in the current fiscal year, it raised alcohol, cigarette, and business



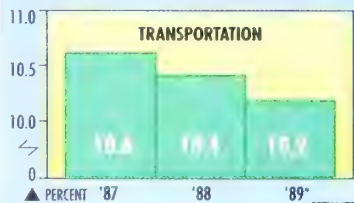
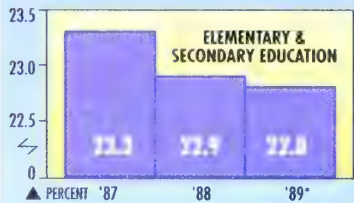
BIDDING FOR STATE FUNDS: BOSTON'S FRANK

SPENDING ON MEDICAID AND PRISONS IS UP...

OUTLAYS AS A PERCENTAGE OF TOTAL STATE SPENDING



...WHILE SCHOOLS AND TRANSPORTATION GET LESS



DATA: NATIONAL ASSN. OF STATE BUDGET OFFICERS

taxes. Those new revenues won't support the proposed fiscal 1990 budget, however, and state leaders are already in a partisan spat over what to do next. Democratic lawmakers have proposed a sales tax on services—a plan that has sent Republicans rushing to their microphones. Warned Assembly Minority Leader Robert G. Jaekle: "If you can wear it, eat it, drink it, smoke it, or watch it, you'll pay a new tax on it."

POLITICAL HAY. In New Jersey, some of the tax proposals are coming from Republicans. There, lame duck GOP Governor Thomas H. Kean is struggling to avoid a deficit that could total \$700 million for this year and fiscal 1990. Five Republicans are seeking the nomination to succeed Kean, and one, State Senator William L. Gormley of Atlantic County, wants to raise liquor taxes and repeal a state income-tax deduction for property taxes. But another GOP candidate, Assembly Speaker Chuck Hardwick, is making political hay by dumping on it.

Elsewhere, a strong economy has kept state finances healthy, even in states that had been hurting. Oklahoma is back on its feet after a round of painful tax increases and spending cuts. Texas should balance its budget, but only by



OO, STRIKING LOS ANGELES TEACHERS, AND FLORIDA'S SUNNY ISLES BRIDGE, CURRENTLY UNDER CONSTRUCTION

shifting \$200 million in funds earmarked for energy conservation to general operating funds. While Texans wait for higher oil prices to translate into new revenues—and that could take another year—politicians are squabbling over whether to raise cigarette taxes.

Among the oil states, only Louisiana remains on the critical list. In late April, voters rejected Democratic Governor Buddy Roemer's tax-reform plan, and the state now faces a \$720 million deficit. A shaken Roemer is trying to cobble together a new plan that would raise about \$400 million in revenues. At the same time, he's proposing \$300 million in pending cuts, including a 25% reduction in vocational education.

While no governor has it worse than Roemer, in the curious world of state budgets even good news can bring trouble. In California, GOP Governor George Deukmejian has just "found" a \$2.5 billion revenue windfall that will put the state safely in the black. Trouble is, a 1979 ballot initiative will block increases in most programs. Last year's Proposition 98 requires that at least 40% of any surplus go toward education. "We put this noose around our neck, and there's no give no matter how big our neck

grows," laments John Vasconcellos, Democratic chairman of the Assembly's Ways & Means Committee.

The fiscal confusion in Sacramento is causing big problems in Los Angeles, where striking teachers may continue their walkout until the end of the school year. With big bucks in sight, the teachers have little incentive to agree to a contract any time soon.

BIGGEST HIT. Education faces tough going in budget fights around the country. Says Stephen Gold, director of fiscal studies at the National Conference of State Legislatures: "There's fierce competition for state dollars, and today, money is going to prisons at the expense of education."

Nationally, education's share of state funds has been declining since 1985. But spending for prisons and the staffs to run them has grown from \$12 billion in 1987 to \$14.6 billion this year (charts). And there's no end in sight. Texas plans a staggering 20,000 new prison beds. New Jersey, which has doubled its prison space over the past seven years, wants to expand by 3,000 more beds.

Even prison spending is being dwarfed by state outlays for health care. Congress has been thinking about making

employers pay for benefits that Washington can't afford. For the states, such "mandated benefits" are a reality. Congress last year required states to expand welfare and health care benefits but failed to provide additional money.

The biggest hit on state treasuries comes from medicaid, the federal-state health-care program for the poor. In 1980, states spent about 7% of their budgets for the program. By 1987, medicaid claimed 10.4% of state spending and this year will reach 10.8%. "State medicaid spending will top \$50 billion," says Gerald H. Miller, executive director of the National Association of State Budget Officers. "And it will do nothing but get worse." Miller estimates it will swallow 15% of state outlays by 1995.

So far, most governors have been able to cope with the growing public appetite for services without resorting to major tax increases. But the respite is unlikely to last. The economy is slowing, and President Bush is exhorting the states to tackle festering social problems. What's missing is money from Washington. And that means the budget turmoil in the nation's statehouses can only get worse.

By Howard Gleckman in Washington, with bureau reports

THE GROUP OF SEVEN IS ACTING MORE LIKE THE SEVEN DWARFS

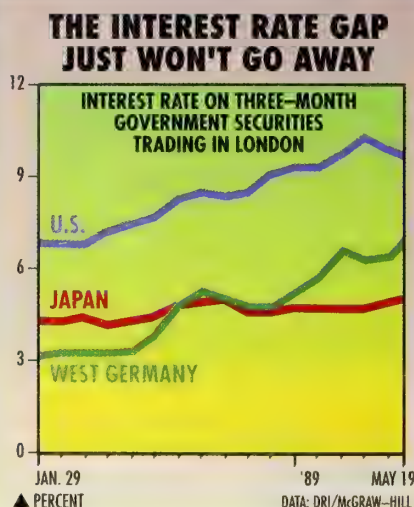
Why the G-7 won't—or can't—check the dollar's rise

Five times in the last two and a half years, central banks of the major industrial nations rode to the dollar's rescue, propping it up when markets wanted to drive it down. Each time the Group of Seven saved the dollar, they made their pledge to stabilize exchange rates a bit more believable.

So where is the G-7 now that the dollar has soared out of the trading ranges that central bankers and finance minis-

ried, warning in a White House statement that an extended rise in the dollar "could undermine international efforts to reduce global trade imbalances."

The risks of the dollar runup, says Massachusetts Institute of Technology economist Paul R. Krugman, present "a clear-cut case where governments need to give the markets a shock." Small rate adjustments in the U.S., Japan, and Germany, he adds, "would burst this bubble



GREENSPAN: MORE WORRIED ABOUT INFLATION

ters have defended so assiduously since 1987? Stranded on the sidelines.

The G-7's day-to-day working tool, trading currencies on the open market, has proved all but useless. The Federal Reserve and other central banks dumped billions of dollars into the markets—and traders only asked for more. On May 24, the dollar hit 2.01 marks and 142.9 yen. Most analysts say the G-7 had hoped to hold the dollar below 1.90 marks and 140 yen. Policy cooperation, in the form of interest rate cuts in the U.S. and rate hikes in West Germany and Japan, would surely bring currencies back into line. But all three nations see compelling domestic reasons to hold off. As a result, the G-7 may have to accept a higher range for the dollar—perhaps up to 2.10 marks and 150 yen.

Unless something gives, the dollar's unchecked rise could recreate the trade strains of the mid-1980s. With improvement in the U.S. trade deficit slowing, protectionism may already be on the rise. The Bush Administration is wor-

suddenly and easily, at no risk to the domestic economies."

That's not likely to happen. To convince traders that they're serious, the Fed, Germany's Bundesbank, and the Bank of Japan would have to act simultaneously, as they did in an April, 1987, dollar rescue. But this time each country is waiting for the others to move—and each can make a convincing case that its rates are just fine for now.

The Fed would have to start the process by easing, and some governors argue that it should. Vice-Chairman Manuel H. Johnson reasons that the drop in long-term rates and commodity prices

Unless something gives, the dollar's recent runup could recreate the trade strains of the mid-1980s

proves the Fed has tightened enough. The dollar's surge adds another reason to ease, says Fed Governor H. R. Heller: "A policymaker who ignores change-rate signals does so at his peril."

But that view meets stiff resistance from inflation hawks among the presidents of the 12 regional Fed banks. It is unanimously held at Fed headquarters. Governor Wayne D. Angell says the dollar's rise as a "bounce" after a four-year fall. If the central bank sticks to its long-term goal of price stability, Angell argues, currency markets will calm themselves. And while Chairman Alan Greenspan hasn't joined the debate, he's known to be more concerned about the Fed's inflation-fighting credibility than about relatively small, perhaps temporary rises in the dollar.

LOOKING OUT FOR NO. 1. Some rate hikers are likely abroad. On May 24, the Bank of England engineered a full-point rise in the prime rate. Japan may soon follow with a more modest rise. But in both cases, domestic inflation, not exchange rates, is driving monetary policy. In Japan, import prices, largely fueled by the dollar runup in oil, have risen by 6.6% in the past year. But "Japan will act according to its own domestic needs"—not G-7 priorities—declares a Tokyo banker.

Germany's economy is strong enough to tolerate tighter money, but Bonn trade relations might not be. Despite a fall against the dollar, the mark is still overwhelming other currencies in the European Monetary System and feeding a growing German surplus against its major trading partners. And Bundesbank officials argue that further interest rate increases are not needed to stem the dollar, still at just 3%.

With currency-market intervention failing and major players reluctant to adjust interest rates right now, the G-7 can only stand on the sidelines as the dollar surges. Treasury Secretary Nicholas F. Brady contends that global political jitters make the dollar an attractive haven for both speculators and nervous foreign investors. If he's right, the currency markets will eventually calm themselves, perhaps with a push from some new central-bank intervention.

However, if he's mistaken and the dollar has been a basic realignment of Western economies, then the G-7 will have to adopt a different course—probably at the Paris economic summit in July. If governments cannot or will not adopt policies to check the dollar, they'll have to try for stability at the new, higher level. And that could be bad news for efforts to wipe out the U.S. trade deficit and to keep protectionism at bay.

By Mike McNamee in Washington, bureau reports

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takes over another, one accounting firm is out—and those clients that remain demand lower prices on such bread-and-butter services as audits. That's why the Big Eight have been expanding aggressively into such higher-margin lines as consulting on how clients should integrate various computer systems.

BIG VOTE. That sort of consulting demands expertise that takes time to develop in-house and can be costly. "Merging allows us to get more specialists," says Ray J. Groves, chairman and chief executive of Ernst, who, with his counterpart William L. Gladstone of Arthur Young, will co-manage the combined firm. Gladstone says the merger will enable the two firms to make investments in software and artificial intelligence that would be difficult for either alone.

If the combined 6,100 partners go along with the merger—as they are expected to do when they vote next month—they'll create one formidable outfit: 70,000 employees operating in 100 countries and bringing in revenues of \$4.3 billion. That's about \$300 million a year more than KPMG Peat Marwick, the next-largest firm.

Indeed, Big Eight watchers think the new firm has the right stuff. For one, the corporate cultures are alike. What's more, their strengths are complementary. For example, Ernst clients include many manufacturing companies and commercial banks; Young, on the other hand, has more high-tech outfits and investment banks.

CRITICAL MASS. Geographically, Young is strongest on the East and West coasts, while Ernst's turf runs through the heartland. "The new firm will have No. 1 or No. 2 market presence in 50 of the 60 largest cities," observes James C. Emerson, publisher of the *Big Eight Review*. "If you're not at the top, you're ignored."

Much the same could be said abroad. In Europe, the combined firm will start out as one of the top three everywhere but in Finland and Italy, says Gordon A. Anderson, chairman of Arthur Young in Britain. And in Japan, the combination makes the two firms No. 1—always a big selling point with Japanese clients.

Will this combination prompt others? Lawrence A. Weinbach, CEO and managing partner at Arthur Andersen & Co., is skeptical. "It isn't how big you are but how well you serve your clients' needs," he says. But if clients keep merging, the professionals that serve them may have no other choice but to follow suit. Don't get too comfortable with the Big Seven. It could as easily become the Big Five.

By Jeffrey M. Laderman in New York, with bureau reports

REAL ESTATE

ABLE TO LEAP THE SEARS TOWER IN A SINGLE BOUND?

Many dream of building a taller skyscraper. Miglin-Beitler thinks it can

Announcing plans for the world's tallest skyscraper is a great way to make headlines. Actually building it is quite another matter. Just look at the path to the top of the sky, strewn as it is with well-publicized but never realized plans, from a 500-story Houston tower to Donald J. Trump's two aborted proposals for New York. Now, Chicago developer Miglin-Beitler Inc. hopes to rise above all that.

By 1992, the firm wants to erect a 125-story skyscraper in Chicago, just three blocks from the current tallest, the 110-story Sears Tower on the southwest end of Chicago's Loop. Estimated cost: \$200 million-plus. The firm won't name them, but it claims that one major U.S. pension fund and a Japanese bank already have expressed interest in financing the deal.

Even if Miglin-Beitler does line up the dough, it must surmount lots of other problems. The principal one: acres of competing space. Yet the developers are all optimistic. "In order to build tall, most people think you have to build bulk," says J. Paul Beitler, a principal in the firm. "We're building height without girth." By limiting the skyscraper to 1.2 million square feet and each floor from 18,000 square feet at the base to 10,000 at the top, the firm hopes to limit the time and cost of construction.

LOTS OF LIGHT. Though formed just seven years ago when Beitler and partner Lee Miglin left Chicago developer Arthur Rubloff & Co., Miglin-Beitler has undertaken several ambitious projects, including a 50-story tower now going up across the street from the proposed skyscraper's site. For that spot, architect Cesar Pelli's design envisions more than 110 floors of office space atop 2 floors of

retail stores, a mezzanine, a 2-story health club, and 10 levels of parking.

The slim structure is both a master stroke and a huge headache. Brilliant for the tower wouldn't compete with the mostly windowless back office space that's supposed to open up in the Sears Tower if, as many expect, Sears, Roebuck & Co. relocates about 5,000 employees over the next few years. A headache, because by appealing to vie-

conscious outfits such as law and ad firms, the skyscraper would compete with most of the nearly 10 million square feet in new space coming on the market within two years. "To lease 1 million square feet, a lot of small tenants—that would be tremendous undertaking," said Jeffrey Barrett, manager of Coldwell Banker's local commercial real estate section. "You would need to land some major tenants."

Big tenants, who may want 100,000 square feet or more, may balk, for in the tower that could require 10 floors. "Taking up two or three floors gets to be a physical problem. By the time you get up around 10 floors

that's tough," notes John I. Wrzesinski of consultant Landauer Associates.

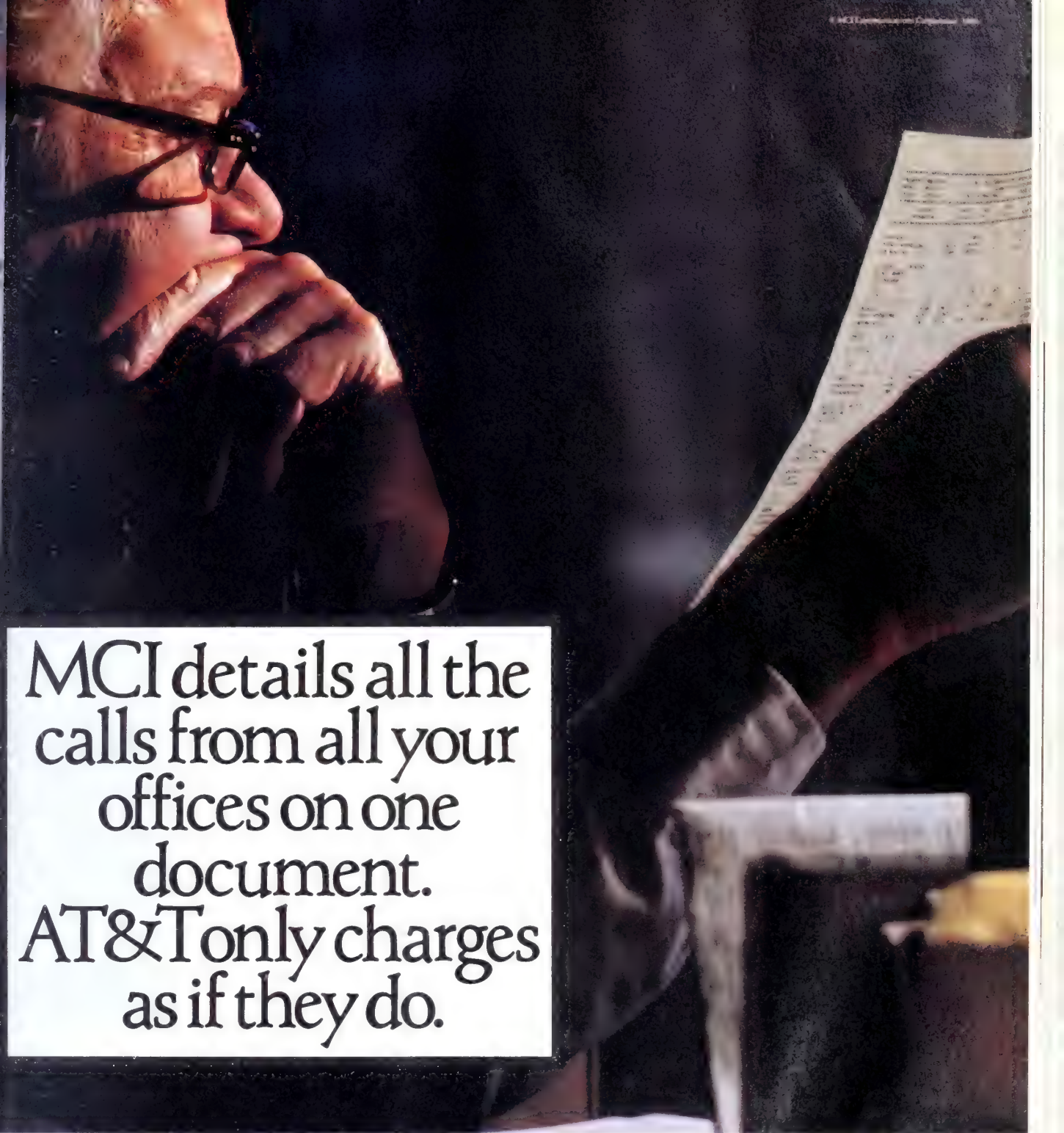
Critics also find the skinny design impractical for such down-to-earth stuff as plumbing and transportation. "This will be the only building where you're at the top of it, and you'll be 20 minutes from the Loop," said Stephen J. Sinclair, president of Rubloff Real Estate and Capital.

Don't tell Beitler that. On his desk is a copy of Frank Lloyd Wright's 1956 design for a mile-high tower that never got built. Just as Wright no doubt was, Miglin-Beitler is serious. It's simply that reality may find a rude way to intervene.

By David Greising in Chicago



A MODEL OF THE 125-STORY TOWER



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EDITED BY HARRIS COLLINGWOOD

FROM PENNY STOCKS TO A GUILTY PLEA

► Will penny-stock promoters start doing hard time? That's the prospect facing Robert Humphrey, the former national sales manager of F.D. Roberts, a now defunct Paramus (N.J.) brokerage. Humphrey pleaded guilty on May 23 to "systematic stock manipulation schemes" that cost the public more than \$67 million over three years, according to Samuel Alito, the U.S. attorney in Newark, N.J. Alito says that Humphrey used dummy accounts to profit by as much as 400% in a single day's trading.

Humphrey faces a maximum of 20 years in jail and \$1 million in fines, plus any restitution to customers ordered by the judge. Three other Roberts brokers also pleaded guilty to stock manipulation charges and face maximum sentences of up to five years and fines of \$250,000.

Meanwhile, Blinder Robinson is feeling some unwelcome Florida heat. On May 17, the Florida comptroller, who's seeking to revoke the firm's license, ordered it to stop violating the state's securities laws. A two-and-a-half year investigation by the comptroller's office alleged manipulation of penny stocks, as well as excessive markups, stock churning, and unauthorized trading. Blinder operates 10 offices in Florida. Blinder officials didn't return calls seeking comment.

DREXEL SELLS OFF ITS MUTUAL FUNDS

► Drexel Burnham Lambert, which is dropping out of the retail brokerage game, is bailing out of mutual funds, too. The firm is selling Drexel Management, which runs about \$2.8 billion in mutual funds, to a partnership led by Martin Zweig, a money manager and investment newsletter publisher, and Eugene

Glaser, Drexel's marketing director. Zweig already runs two closed-end funds, and the acquisition will give him money-market, bond, and equity mutual funds. Terms weren't disclosed.

The firm is also selling its flagship Drexel Burnham Fund to a partnership headed by I.W. "Tubby" Burnham. Burnham, who plans to remain as honorary chairman of Drexel, founded the \$181 million growth and income fund in 1969 and still manages it. It earned a top rating in the 1989 BUSINESS WEEK Mutual Fund Scoreboard.

THIS TIME, XEROX IS OPPOSED TO COPYING

► Xerox says it intends to begin charging computer companies for some widely used software ideas that it claims it invented many years ago. At issue are "graphical user interface" programs such as those used in Apple Computer's Macintosh and Microsoft's Windows program for IBM-compatible PCs.

The programs display information in overlapping windows on a video screen. Xerox is generally credited with inventing the powerful software in the 1970s, but it may have a hard time enforcing its claims to intellectual property rights after so many years of inaction.

SAYING 'ADIOS' TO TEXAS BANKING IN A BIG WAY

Not all Texas bankers have lost their sense of humor. Consider Tom Jaeb, chairman of tiny Forestwood National Bank in Dallas. Drivers on Dallas' North Tollway have grown used to the bank's billboard, which offers homespun counsel on interest rates and daily life. On Apr. 17, the billboard read: "Had enough? Amen!"

Jaeb has certainly had enough of Texas real estate, though he disdained risky lending, Forestwood's loan portfolio tanked when much larger Texas banks collapsed. And Jaeb, his sign suggests, is feeling some relief now that his long struggle for independence may be drawing to a close. Forestwood's annual meeting on Apr. 17, he spoke candidly about how tough it is to run a Texas bank these days and hinted that he's looking for a buyer. Jaeb says he also wants to buck up his fellow Texans. "The world's not ending," he says, "and by 'Amen' I mean 'Thanks be to God. Let's go forward."



The company's move comes a year after Apple sued Microsoft and Hewlett-Packard for allegedly copying the Macintosh user interface, which, Apple admits, relies on many Xerox ideas. That suit has yet to be resolved.

A NEW ESTIMATE OF THE S&L BAILOUT

► For months, the Bush Administration has said that its plan to rescue the ailing savings and loan industry will cost \$157 billion over the next decade. But figures from the Office of Management & Bud-

get suggest that the final bill could be far higher. The new total: \$285 billion, according to Comptroller General Charles Bowsher.

Bowsher's figure reflects the assumption that the bonds to finance the rescue will be paid back over 30 years, and it includes \$78.7 billion in interest payments from the years 2000 to 2021. And no sources say a third estimate from the congressional General Accounting Office, may come in at about \$300 billion.

AETNA: CALIFORNIA IS SAFE FOR INSURERS

► On May 24, Aetna Life Casualty announced that it would once again write new car insurance policies in California. Earlier in May, the insurance giant stopped writing new policies after the California Supreme Court upheld most of Proposition 103, the ballot initiative that was intended to roll back car insurance rates by 20%.

The court also gave insurers an out, saying that they had a right to earn a "fair return" on their policies. And that convinced Aetna, after some reflection, that it was safe to do business in California again.



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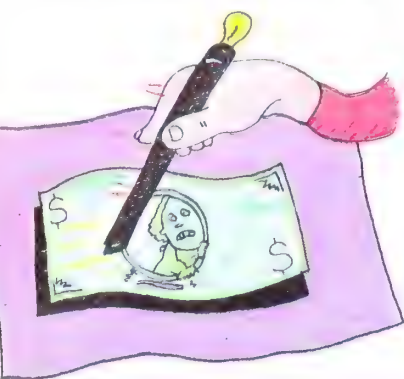
The Golden Gate Bridge,
photographed by Alan Ross.


Bank of America

Developments to Watch

EDITED BY EMILY T. SMITH

THIS GIZMO GETS TOUGH WITH ILLEGAL TENDER



Counterfeit money costs retailers millions every year. Vistatech Enterprises Ltd., however, has a new device to help merchants snag bogus bills: the world's smallest counterfeit-bill detector.

The \$99.95 pen-size device separates the real bills from the fakes by detecting magnetic particles

that are embedded in the ink on all U.S. paper currency. "The system works because portions of the ink are magnetic [and] some are not in genuine bills," says Morris L. Weiser, president of the New York City company. To spot a ringer, you rub the device's magnetic sensor head over the amount spelled out under the portrait. If it's a real bill, the amount is printed in magnetized ink—so a green light goes on, and a tone sounds. To be certain, test the black Federal Reserve seal. It's not printed in magnetized ink, so the red light should come on.

TI INTRODUCES THE CHIP OF TOMORROW

Gate arrays are the hottest class of chips around. These bits of silicon replace dozens, even hundreds, of off-the-shelf chips and shrink the size of printed-circuit boards. They also enable companies to add custom features at about 2% to 10% the cost of full-custom chips.

Gate arrays, which are produced as a grid of isolated gates, get customized by laying down a user's own special design for connecting the gates. The more gates that can be connected, the more sophisticated the final integrated circuit can be. Trouble is, stringing "wires" between the gates without crossing one another means that only about half of the gates can be incorporated into any given design.

But Texas Instruments Inc. has developed a gate-linking method that boosts the share of usable gates to 80% or more. Thus, the 100,000-gate chip that TI introduced at the mid-May Custom Integrated Circuits Conference may be the world's densest—despite other chips with more "raw" gates. Moreover, the gates on TI's new chip combine the faster speed of bipolar transistors with smaller complimentary metal-oxide semiconductor (CMOS) transistors that need less power. TI believes this BiCMOS combo plus higher gate-array density will be just the ticket for tomorrow's higher-performance computers.

DEFENSE TRAINS ITS SIGHTS ON THE MANUFACTURING PROCESS

Critics have long complained that too much federal research money is being spent on defense. At the same time, the Defense Dept. is deeply concerned about the ability of its contractors to hold their own against foreign competition. So the Defense Advanced Research Projects Agency (DARPA) is killing two birds with one stone. It is launching an open

program that it hopes will keep U.S. manufacturers ahead. The new, five-year, \$100 million DARPA Initiative in Concurrent Engineering (DICE) aims to slash the time needed to get a new idea to market by at least 50%. Concurrent engineering involves simultaneous design of a product and the process by which it is made.

West Virginia University's new Concurrent Engineering Research Center is DICE's hub. At the Morgantown center, 80 to 100 researchers will harness artificial intelligence and computer-aided engineering systems to create concurrent engineering techniques and tools. They will collaborate with DICE-funded researchers at other schools. To bring the project to market, DARPA has contracted with General Electric, Cimflex Teknowledge, and Bell Atlantic.

AT LOS ALAMOS, COLD FUSION REMAINS A HOT TOPIC

Some new evidence for the "is it or isn't it" debate over cold fusion-in-a-bottle: Scientists at Los Alamos National Laboratory and physicist Steven E. Jones of Brigham Young University reported on May 24 that recent cold-fusion experiments have produced measurable bursts of neutrons. "This is very strong evidence of fusion," says Jones.

Jones began working with a team of 12 scientists at Los Alamos in April, shortly after reporting that he had produced low levels of cold fusion by electrolysis at BYU. In this test, the Los Alamos researchers ran three sensitive neutron detectors to look for background radiation that would invalidate the experiment, but they saw the bursts of neutrons only on detector monitoring the fusion experiment.

Even with these new results, Jones's claims remain far more modest than those of B. Stanley Pons and Martin Fleischman at the University of Utah, who say they produced fusion and heat. Jones says the Los Alamos data "suggest we might be able to increase the rate of neutron production." But he doesn't believe it will be a commercial energy source.

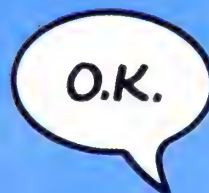
ARTIFICIAL LIMBS WITH LIFELIKE MOVEMENT

It's getting harder for leg amputees to think of themselves as handicapped. Thanks to prosthetic devices, many can walk almost normally. Now, Flex-Foot Inc. says it has made an artificial limb that won't even leave users with a limp.

The Laguna Hills (Calif.) company has developed a prosthesis that provides almost natural foot movement. Unlike conventional artificial legs that come in two pieces with a leg and a foot, the Modular II Flex-Foot is a single unit with an inner metal bar that allows the ankle and foot to bend. The carbon-graphite composite leg is durable enough to withstand running or uphill jogging. At 8 ounces, it's light enough so that it gets rid of that ball-and-chain feeling, says Flex-Foot inventor Van Phillips, 34, who's also an amputee.

Dennis Oehler, the world's fastest leg-amputee sprinter, will test the Flex-Foot on May 25 by training with Carl Lewis, the 1988 Olympic 100-meter champion, at the University of Houston. The Flex Foot will sell for \$4,000 to \$6,000.





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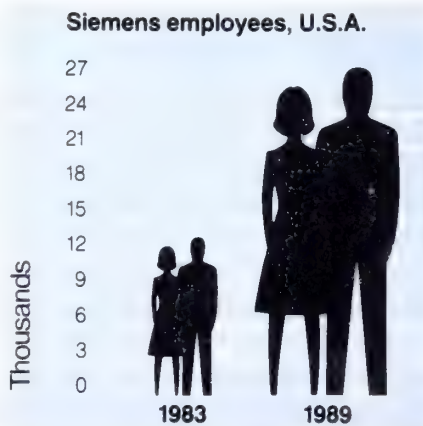
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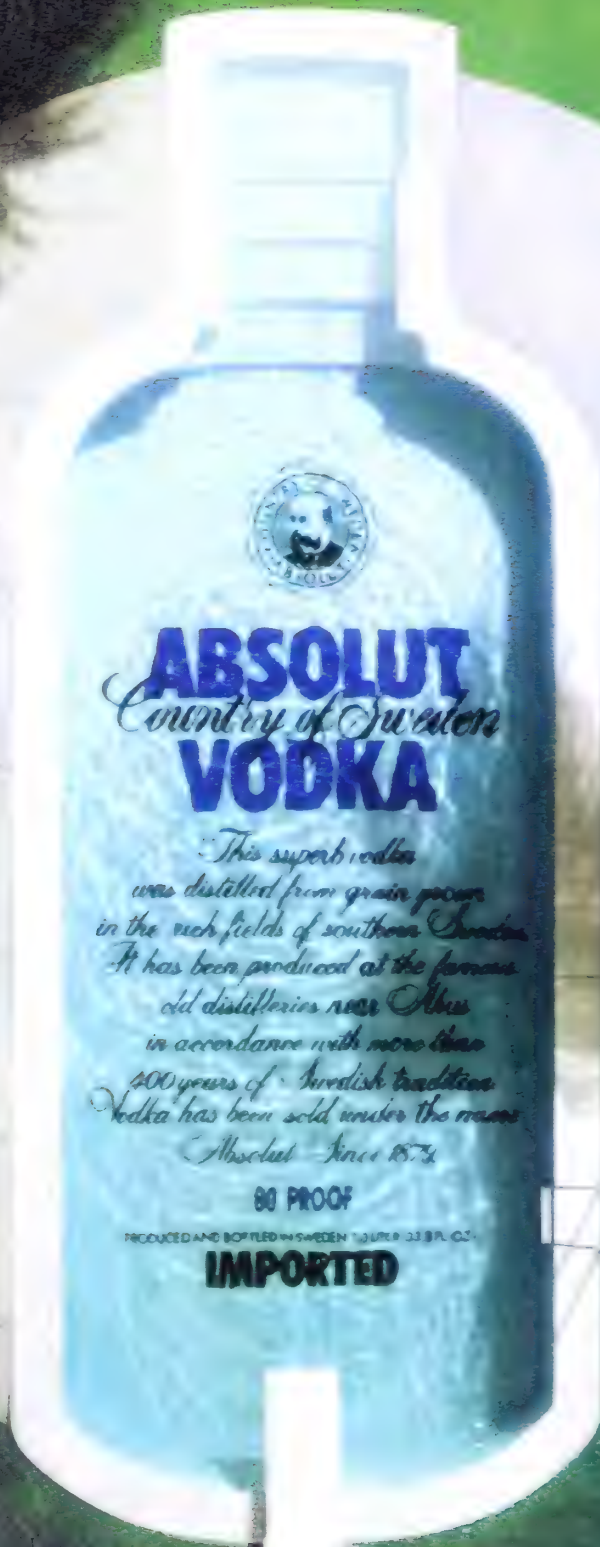
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A CAR THAT'S JUST THE WAY ITS DESIGNERS WANTED IT

The GM200 minivan was meant to be a radically different-looking machine

Somewhere on the way from the drawing boards to the dealer's floor, showy new car prototypes usually lose their flash. The reason: auto executives often worry that different or radical styling will drive customers away. But General Motors Corp.'s sleek new plastic-bodied passenger van is an exception—because the company had little choice but to make it stand out. Rival Chrysler Corp., which hatched the minivan stampede six years ago, dominates the market. It made half of the 800,000 minivans sold last year—and made slightly more than 100,000. James E. Orndorff, GM's minivan projects chief engineer, concedes that the company launched a full-scale attack on the market after "seeing what competition was able to do." Meanwhile, GM has been slow to join the aerodynamic-styling revolution begun by Ford Motor Co. That left GM open to criticism for stodgy, look-alike cars. But the GM200 minivan, which will be available in the fall, may be the answer to both problems.

FREE HAND. Backed by Pontiac chief J. Michael Losh and former Chevrolet General Manager Robert D. Burger, the minivan's team of designers was told to make something radically different. They got an unusually free hand in shaping the vehicle. Most new-car designs are toned down from the original concept, but this time the final product closely resembles some of its initial drawings. Even the top brass, including chairman Roger B. Smith, went along for the ride. "They had identified the value of uniqueness," says Stanley R. Milen, executive designer. "The chairman didn't go into withdrawal when he saw it."

The designers started sketching in April, 1985, and produced a full-size clay model that October. Working through the winter holidays and nearly around the clock, they delivered the final blueprints in January, 1986.

The van's huge, angled windshield posed one of the biggest challenges. After prototype testing in Arizona, GM's air-conditioning engineers said the window let in so much sun that the van would require a large, power-hungry cooling system. Conventional tinting proved insufficient, so in 1987, GM called in PPG Industries Inc. PPG modified the windshield with an invisible sandwich of metallic oxide to reflect or absorb 30% more infrared and ultraviolet light.

Cleaning the window proved troublesome, too. Because of the van's pointy front end and aerodynamic shape, body-

rowed an idea for modular seating from the Renault Espace, a plastic, pointy-nosed minivan introduced in Europe five years ago. GM refined Renault's quick-release latching mechanism, and supplier Atoma manufactures the seats under license. In GM's version, up to five seats can be shifted into a variety of configurations. Each weighs just 34 pounds and unlatches in seconds. There are other civilized touches inside: Storage bins and drink wells abound. Seat backs fold down to form tables. There's even a built-in air pump for inflating everything from tires to rafts. It's part of the van's

THE OLDS SILHOUETTE: THE HUGE, ANGLED WINDSHIELD WAS A CHALLENGE



mounted spray nozzles sent washer fluid spurting over the top. So engineers at GM's Delco Remy Div. built nozzles right into the mammoth 24-inch wiper blades. For defrosting, another tricky problem with such a large window, Bowles Fluidics Corp. came up with a simple plastic vent that sweeps the window with air. It has no moving parts, relying instead on two control ports to direct air pressure from side to side. Two hand-sized vents clear the entire 17-square-foot windshield and two smaller side windows.

Back in the passenger area, GM bor-

rowed a load-leveling system, which keeps the rear end from sagging under weight.

Like the Chevrolet Corvette and the now-defunct Pontiac Fiero, the GM200's body is made of fiberglass-reinforced plastic. However, this is the first time the material will be used in high-volume production. Instead of bolting much of the plastic to a steel frame, which was time-consuming, GM is gluing most of the panels to the frame. And unlike the Fiero, whose steel skeleton was strong enough to be driven without body panels, the van's panels contribute structural strength. In fact, GM says the van's configuration is so solid that the next-generation GM200 will feature a significantly thinner, lighter frame and skin.

'OUTSIDE IN.' At the company's Tarrytown (N. Y.) plant, GM engineers are still tuning the robotic system that applies 2,000 inches of glue to body panels and tilts them into place. The process can be more cumbersome than spot-welding

Under the skin, the GM200 is more conventional: Its engine and transmission don't use new technology

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sheet metal, partly because a solid body requires total cleanliness. Every panel must be wiped with solvent. The robot also must be programmed to apply enough glue for a complete bond but not so much that it oozes at the edges. Complete seals can cause annoying noise or, worse, structural weakness.

Running full steam, the Tarrytown plant can build up to 260,000 vans a year. At those volumes, GM says that plastic panels become less expensive than steel, since retooling costs for planned body changes are lower in plastic than steel. GM's investment in the project is approximately \$600 million, says Morgan Stanley & Co. analyst Scott F. Merlis.

Although the GM200 is fashionable and futuristic-looking, it has problems. Bennett E. Bidwell, chairman of the automotive arm at rival Chrysler, chides the vehicle for being designed "from the outside in." He has a point: Under the skin lurks a conventional van. It shares components with GM's front-drive midsize sedans, but its platform is basically truck-like. The V-6 engine lacks some modern features as overhead camshafts and multiple intake and exhaust valves. And GM chose an old-generation, three-speed transmission in lieu of the smooth-shifting, fuel-saving electronic four-speeds increasingly common in cars and trucks. GM's Orndorff concedes the transmission was a compromise made partly to save money. But he defends it as a good choice for city driving, where minivans are commonly used.

PARKING PROBLEMS. The van's angled front can also be annoying. Even though drivers can reach only half the depth of the cavernous dash, making it nearly impossible to retrieve objects that may collect there. And it's very difficult to judge the location of the front end. GM tests show drivers have trouble parallel parking. The GM200 may also do little to quiet critics of the company's look-alike models. In addition to Pontiac's version, the Trans Sport, and Chevrolet's, the Lumina APV, Oldsmobile will offer a model called Silhouette. Olds came late to the party, in 1988, bleeding from a customer exodus to trucks. Chevy and Pontiac protested Olds's plans, and GM still isn't saying how supply will be meted out.

In GM's new ads, at least, the company appears confident: A man stands in a large garage gazing down at the van. "You factor it all in," he says. "Safety, comfort, performance. Make changes, improvements... and make sure it ends up beautiful. You know, I think we did it." Come fall, when consumers get a judge for themselves, GM's designers will finally know for sure.

By David Woodruff in Detroit



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Until Now, There Were Good Reasons To Call Them 'Brief' Cases.

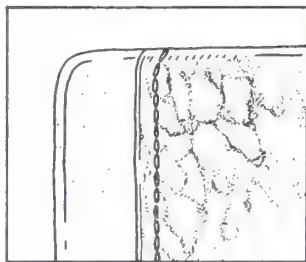
Because most briefcases that look and work great at first, stay that way for just a "brief" amount of time.

And cases that were sturdy and tough weren't exactly great looking. Until now.

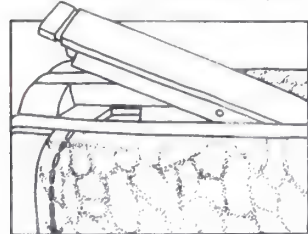
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Recessed latches. Watching the contents of your briefcase fall down an escalator isn't exactly a great way to start a day. That's why our latches are recessed, making it hard for the case to pop open or have the latches knocked off.



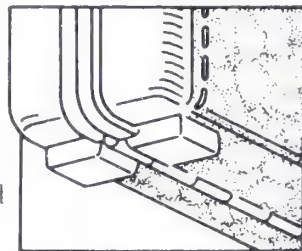
You'll also have a special locking system. And, our exclusive patented right-side-up feature keeps you from opening your case upside down.



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Our full-length hinge.

While most briefcases have two small hinges, we gave our case a single long one to make it sturdier. The hinge runs the full length of the case and is designed to stand up to abuse—even if you overstuff the case.



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ED BY ANDREA ROTHMAN

JAMES NIVEN: BRINGING LONDON'S FINEST SCENTS TO THE STATES



As James Niven sees it, there are two kinds of venture capitalist. One lives dangerously, pumping money into inventors of "the next Ping-Pong ball" on the unlikely chance he'll make a fortune. The second is more timid, financing only ventures that have passed the startup stage. Niven, the 43-year-old son of the late British actor David Niven, used to be daring. But after watching numerous high-risk ventures of his own go down the tubes, he decided to stick to "mature" businesses.

His latest pick is about as pure as they come: the venerable English firm of J. Floris, which has sold perfumes and dusting powders to well-to-do Londoners since 1730. In 1987, Niven acquired the rights to bring Floris to the U.S. With \$5 million from some investors, including Texas billionaire Sid Bass, Niven intends to recreate the London shop in locations across the U.S. and Canada. The first store opened in November on New York's Madison Avenue. A second opens in July in Short Hills, N.J. Niven foresees 15 stores by 1994, with sales of \$1 million each. The Harvard University graduate, Niven spent four years in corporate finance at Lehman Brothers. But he became "bored" with deals for others. Since 1972, he has financed over 100 ventures—everything from oil wells to genetically engineered foods. His best venture so far was Aunt Millie's Sauces, which he turned around and sold after four years for a \$17 million profit. The secret, says Niven, is taking it seriously. At Aunt Millie's, "I was constantly going into people's kitchens and looking through their shelves," he says. So if friends find him rummaging through their boudoirs, they'll know what's he's up to.

MALARET AND CASIANO: A VOGUISH WOMEN'S MAG THAT SPEAKS SPANISH

The stigma of being Miss Universe," says Isol Malaret, who won the title in 1970, "is that you never have to work—you just have to know how to wear a crown." Malaret, 39, is working hard to dispel that notion. She is the publisher of *Imagen*, a Spanish-language women's magazine that has begun an aggressive



drive from its Puerto Rico base into five Northeastern states. Malaret has held the job since 1986, when she and San Juan publisher Manuel A. Casiano Jr. first unveiled *Imagen* ("image" in Spanish). Casiano, 56, is chairman of Casiano Commu-

nications Inc., whose flagship is the 45,000-circulation weekly *Caribbean Business*. He handles *Imagen*'s finances, and she runs its operations, which includes everything from wooing advertisers to overseeing story and photo selection.

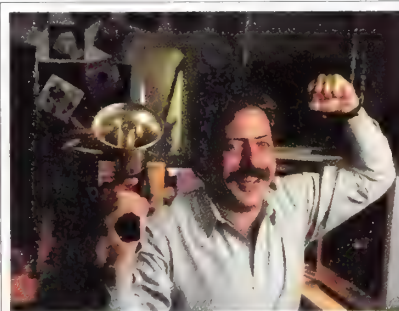
After winning the Miss Universe crown, Malaret ran a franchised modeling school, pitched Clairol Inc. products, and founded a chain of boutiques. In the mid-1980s she hooked up with Casiano, who had been publishing *Caribbean Business* since 1973 and was plotting a magazine for upscale, fashion-conscious Hispanic women. *Imagen*, whose advertisers include Volvo and Gucci, now has a circulation of 73,600 in Puerto Rico. It generates about \$4 million a year in sales, Casiano says, and became profitable after 16 months.

The new Northeast version of *Imagen*, which debuted this winter, has garnered 9,000 paid subscribers in five states and sells roughly 12,000 newsstand copies a month. But selling ads in New York has been tough, partly because other Hispanic magazines have fizzled out. "We have to remind advertisers that we've been in publishing for 16 years," Casiano says. That's a stigma they both get to grapple with.

By Peter Finch in New York

LEE ABRAMS: OUT TO FILL THE AIR WITH HEAVY-METAL FARE

Lee Abrams has built a career on figuring out what kind of music people want to hear—often before they know it themselves. Among pop-music pundits, he's best known as the pioneer of "album rock," or long-playing hits, in the 1970s. He was also influential in promoting New Age music in the early '80s. His knack for predicting music trends has won him top billing among programmers and has prompted marketing giants such as Coca-Cola Co. and Walt Disney Co. to pay for his insights on pop culture. Last year, for instance, Disney hired Abrams to help plan a proposed adult-oriented theme park in Burbank, Calif.



Now he is about to put his reputation to the test. Having designed programming for more than 175 stations, 37-year-old Abrams wants to bring what he vows is rock radio's next big thing—heavy metal—to a station near you. He says of the screeching guitar music: "It's the mainstream music of tomorrow." Since last fall, Abrams has been honing a frenetic, heavy metal format, called Z-Rock, for Dallas-based Satellite Music Network Inc., a radio superstation that beams programming nationwide. "We're creating an MTV of the airwaves," says Abrams, one of the network's managing directors. Mingled between music and commercials are such brash features as the "Nightly Nuke" and "Bake a Bozo," where deejays simulate microwaving out-of-favor records and celebrities.

He may be on to something: Although ignored by the radio establishment, heavy metal now dominates *Billboard*'s album sales charts, and the Grammys recently bestowed its first award for best heavy metal recording. The Z-Rock signal is already sent to 19 cities—including Houston, Denver, and Minneapolis—but Abrams expects to be broadcasting Z-Rock into more than 100 markets soon. People with teenagers in the house may want to start stocking up on cotton balls.

By Dean Foust in Atlanta

FORGING THE NEW BETHLEHEM

Walter Williams has 'The Steel' humming. Can he get it to sing?

By the time Walter F. Williams took the helm as chief executive officer of Bethlehem Steel Corp. in March, 1986, he could barely face his neighbors. He avoided walking to the grocery store or dining at his Colonial-style country club for fear of meeting laid-off friends. His smoking had increased to more than three packs a day. Bethlehem, facing its fifth straight year of losses, only had several months' worth of cash left in the till. Investors doubted that anybody, much less a career man like Williams, could keep the steelmaker afloat. The company's share price was falling to an all-time low of \$4. Bankruptcy, mused Williams: "That's a heck of a way to end your career."

It was quite a comedown for a company called simply "The Steel" by its employees. Like the rest of the industry, Bethlehem was caught off guard in 1982 by the worst recession in steel demand in 40 years and by a flood of low-cost, high-quality imports largely from Japan. Worse yet, Bethlehem was one of the most inefficient U.S. producers. Caterpillar, Firestone, and Campbell Soup Co. were just a few of the customers that nearly abandoned Bethlehem because of shoddy quality and late deliveries.

Sure, Williams' predecessor, Donald H. Trautlein, a former Price Waterhouse partner, made considerable progress: From 1982 to 1985, the executive team

had slashed 39,000 jobs, installed the company's first real accounting controls, shuttered mills, and spent several billion dollars to upgrade the remaining ones. But it wasn't enough. Williams rolled up his sleeves and did the rest: Over the past three years, he has mounted a highly personal campaign to improve the quality and productivity of Bethlehem's basic steel business. He sold unrelated assets—some 16 major operations, including a plastics company and a steel distributor. He smoothed relations with suppliers and customers. He won wage concessions from labor. He paid down debt and pension liabilities by \$1.7 billion. And he persuaded nervous bankers to stay on board. Wall Street has responded—but only to a point, because it is unsure how a leaner, meaner Bethlehem will fare in a recession. While its stock price has increased fivefold, to \$24, since late 1986, it's still only trading at five times earnings, a far cry from the Standard & Poor's industrial stock price index' multiple of 13.4.

GOOD NEWS, BAD NEWS. Nevertheless, Williams' "Operation Bootstrap" has worked wonders. Aided by a recovery in steel prices, the No. 2 steelmaker posted record earnings last year of \$403 million, an increase of 131%, on \$5.5 billion in revenues. So far this year, Bethlehem's operating profits from steel rose 40% in the first quarter, though net income de-



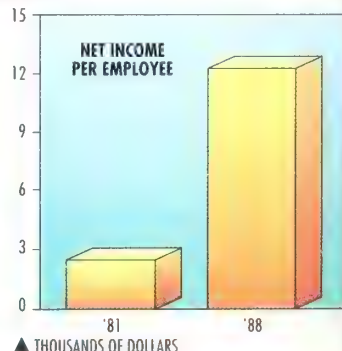
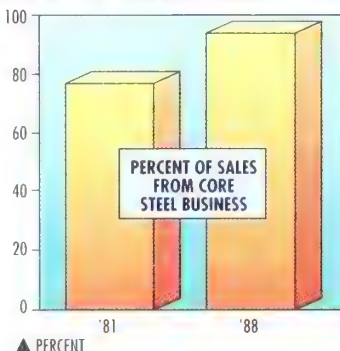
clined because of a onetime restructuring charge. Bethlehem's metamorphosis (table) mirrors that of the U.S. steel industry as a whole—which is now producing at lower cost than Japanese rivals and fast closing the quality gap. But Bethlehem has outclassed even its major U.S. competitors, earning the highest profit per ton last year and 1989's first quarter.

That's the good news. The bad news is that the current steel boom is peaking, and Bethlehem faces a softening market for the heavy-gauge steels used to make automobiles and railway track and construction. A cyclical downturn will only make more stark the unfinished

THE NEW, IMPROVED BETHLEHEM STEEL

	1981	1988
REVENUES	\$7.3 billion	\$5.5 billion
EARNINGS	\$211 million	\$403 million
NUMBER OF EMPLOYEES	83,800	32,900
PRODUCTIVITY Hours used to make a ton of steel	8	4
QUALITY Customer rejection rate on automobile sheet steel	8%	.08%

DATA: BETHLEHEM STEEL CORP., BW





business Williams has before him. He has to spend up to \$3 billion more to push plant modernization and reduce pension liabilities. Even though Bethlehem since 1986 has cut debt from 67% of capital to 31%, past plant shutdowns have created an unfunded pension liability of \$1 billion, the largest in the industry. This costs the company an additional \$130 million a year in cash flow from operations. Williams must also step up productivity drive to pay for rising labor costs. To avoid a potential strike, Bethlehem reached a tentative agreement with the United Steelworkers in May that would hike labor costs 19% over 50 months. "There is still a lot more to be accomplished," he says.

STEEL FRATERNITY. Transforming Bethlehem has been nothing short of a personal transformation for Williams. A civil engineer by training, he joined the company in 1951 and rose through its mill construction, shipbuilding, and steel operations over the next three decades. By the time he became head of steel operations in the late 1970s, Williams was part of an elite fraternity. With a near-monopoly on the U.S. market, domestic producers dictated to customers what to buy and charged premium prices. At Bethlehem, there were perks aplenty—limos, jets, and company-subsidized country clubs. Complacency bred complacency for quality and service. "We thought

'We woke up almost too late. The shock will prevent us from becoming complacent'

WALTER F. WILLIAMS
Chief Executive Officer

nobody could touch us," says Williams.

Enter the Japanese, and Williams, along with the rest of the industry's bigwigs, learned differently. Williams, 60, has spent the past several years in a much less complacent mode. He works 12-hour days and often on weekends. Affordable but tenacious, he often answers his own phone and meets with 50 customers a year to sound out complaints. At regular mill visits, he's known for grabbing workers by the arm to give his sermon on quality and the need for constant improvement. "Williams comes out of his ivory tower and gets his feet dirty walking the plant," says Paul E. Gipson, a union official at the Bethlehem plant in Burns Harbor, Ind.

He helped make plenty of the changes at Burns Harbor, which he helped design and build as a young engineer. The plant is now one of the world's most productive, making primarily sheet steels for carmakers. Aside from laying

off employees, the company formed teams of hourly and salaried employees who regularly get customer input so they can solve quality problems. Workers now take a preventive approach to quality: Instead of waiting to reject bad finished steel coils, they monitor production lines to stave off errors. Union forklift operators who once were unconcerned about banging steel coils before shipping now handle them gingerly. Aided by more than \$800 million in modern steelmaking equipment and incentives that tie pay to profits, the new approach has reduced the amount of sheet steel rejected by Ford Motor Co., for instance, from 8% in 1982 to less than 1% today—about the same as in Japan. Williams wants more, saying: "We will not be satisfied until it's zero."

Customers notice the difference. "It's nothing short of miraculous," says Steven K. Parker, a top purchaser at Campbell Soup. In the fall of 1987, Campbell was about to dump Bethlehem as a supplier of the tin plate it uses to make soup cans. The material had wavy edges, rust damage: "You name it, they had it," says Parker. After receiving a dressing-down at Campbell headquarters, Williams replaced many of his slow-moving plant supervisors at Sparrows Point, Md., where the tin plate is made. With the help of new equipment, the new team has boosted Bethlehem to the top ranks of Campbell's suppliers.

'MUCH TO LEARN.' Even the Japanese are impressed. Bethlehem was able to cut the number of work hours it takes to make a ton of steel in half, to four hours. Japanese steel executives who once boasted that their more modern, more efficient mills would bury Bethlehem are eating their words. The Burns Harbor plant makes a ton of steel in only 2.8 work hours, a record that the Japanese are now trying to match. "[We] have to be more humble," one Japanese executive told a Japanese newspaper after a visit to Burns Harbor.

Williams used the personal touch on bankers as well. By mid-1987, Bethlehem was looking better—it made money in the first half—but the outlook was still grim. Huge debt and pension payments were looming. To be able to cover them, Williams needed to restructure the company's loans, but longtime bankers Chase Manhattan and Mellon Bank turned thumbs down. They had already been stuck with unpaid loans to Chapter 11 victim LTV Corp. and privately worried that Bethlehem might be next. When the stock market crashed in October of that year, Manufacturers Hanover Corp., too, was wavering. But in a 90-minute meeting with Manny Hanny

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Standby Power	18 Hours	8 Hours
Memories	17	12
Super Speed Dialing from Memory	Yes	No
Call-in-Absence Indicator	Yes	No
Warranty	2 Years**	1 Year

*Based on published information available February 1989.
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Chairman John F. McGillicuddy on Nov. 13, Williams successfully argued that Bethlehem's long-term recovery depended on bank credit. Soon after, Bethlehem got a critical, eight-year, \$500 million line of credit from a group of 17 banks. It was testimony to Williams' powerful persuasion. No one knew that the steel market would soon turn up sharply. Bethlehem's drastic retrenchment finally paid off as the dollar fell and prices picked up.

But Williams is still in a race. He knows his huge productivity gains came largely from job cuts. While he has surpassed the productivity of Japanese steelmakers, they're just starting to catch their own bloated work forces and may overtake U.S. producers once again. Williams must install even more modern equipment and make the most of his existing union workers. He'll spend \$10 million annually, largely to finish modernizing the Burns Harbor and Sparrows Point mills, which ship two-thirds of the company's steel and generate virtually all of Bethlehem's profits. If he can't turn around his three ailing Pennsylvania mills that make such products as steel construction beams, he will likely partially shut, spin off, or sell them. **'NIGHT AND DAY.'** His new agreement with the United Steelworkers will aggravate matters somewhat. Williams is deftly "backload" the 50-month contract so that labor costs rise only modestly between now and 1991. Still, by 1993, the pact could boost hourly wages and benefits by 19%, to about \$31. Bethlehem's labor costs are already 18% higher than Japan's and nearly five times higher than fast-rising South Korea's. But in addition, productivity gains, and the steel unit's 3% attrition rate could largely offset any real wage increase.

Even if a recession hits, analysts say "The New Bethlehem" will likely make profits—instead of losing billions as in the past. The numbers tell the story. Compared with 1981, the peak of its last cycle, Bethlehem last year made 17% less raw steel, and its prices didn't rise a cent. Meanwhile, profits per employee were up fivefold, and sales per employee had doubled. "It's like night and day," says Charles A. Bradford, a steel analyst at Merrill Lynch Capital Markets.

Last fall, Williams relaxed enough to quit smoking. Recently, however, he is grown a little edgy. Colleagues say he even occasionally snatches cigarettes. Perhaps he's afraid that Bethlehem is doing too well. Last time "we woke up almost too late," he says. "The shock will prevent us from becoming complacent." Williams never wants to be afraid to face his neighbors again.

By Gregory L. Miles in Bethlehem, Pa.

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FREDDIE AND FANNIE CLEAN UP AFTER THE S&L MESS

The two mortgage giants stand to do a lot more business—and investors are buying in

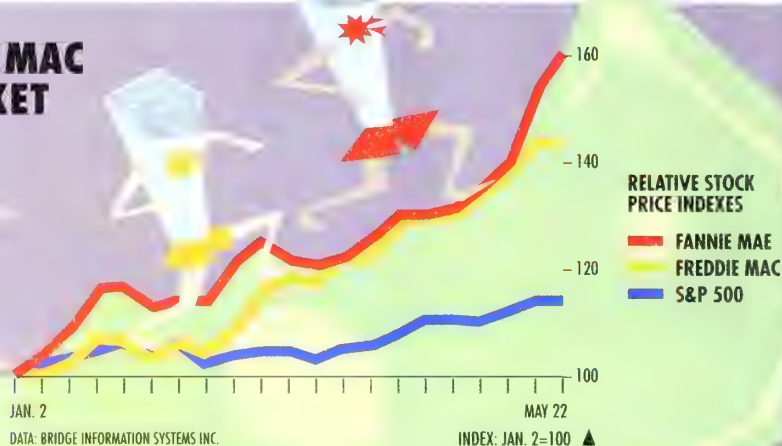
Just ask the folks at the Federal National Mortgage Assn. (Fannie Mae) and the Federal Home Loan Mortgage Corp. (Freddie Mac) about the thrift crisis. They may not admit it, but they have reason to love it, and so do investors in their stock. As Washington starts to wipe out the worst and the weakest of the savings and loan associations, no one is in a better position to

government agencies with the implicit backing of the Treasury, investors in their equity and debt needn't worry much about their enormous leverage. Their unique status gives them lower borrowing costs that let them beat out anyone else bidding for their raw material: single-family home loans of up to \$187,600 each, their federally set ceiling. "These are two

preferred stock, the only equity it has that is publicly traded, has been on a roller coaster ever since it was listed on the New York Stock Exchange last December.

Investors, though, can't be faulted for taking a wait-and-see attitude with Fannie Mae. Its bullish future is a dramatic change from the recent past. Until 1980, Fannie Mae had suffered from the classic thrift problem, only

FANNIE MAE AND FREDDIE MAC ARE OUTPACING THE MARKET



profit from the process than these two.

Created by Congress to promote home ownership, the two companies buy mortgages from S&Ls and other lenders, providing them with fresh cash to make new loans. In turn, Fannie Mae and Freddie Mac package the mortgages into bond-like securities, which they sell to replenish their own coffers.

With fewer thrifts around to meet the demand for home loans, the survivors soon will own all the mortgages that their capital will support, especially under stricter new rules. To keep the game going, they will increasingly look to Fannie and Freddie to take the loans off their hands. The next few years "will be big years" for his outfit, predicts Freddie Mac President Leland C. Brendsel.

UNIQUE STATUS. And when, in turn, Freddie and Fannie sell their product into the market, there will be plenty of customers. Their mortgage-backed securities are about as safe as Treasuries and pay higher rates.

Because Freddie and Fannie are quasi-

unbelievably powerful companies," says Emanuel J. Friedman, an analyst at Washington stockbrokers Johnston, Lemon & Co.

But Wall Street, by and large, has been slow to catch on to just how lucrative a hammerlock on the mortgage-backed securities business can be (chart). Prescient institutions such as the \$8 billion Fidelity Magellan Fund loaded up on Fannie's stock when it languished in the 30s and 40s, a range it was in just a year ago. Now at 81, Fannie Mae is Magellan's largest single stock holding, and other Fidelity funds are following suit. "We have the maximum amount of Fannie that we can legally own," notes Alan Leifer, portfolio manager of Fidelity's Trend Fund. Freddie's

a singularly gargantuan scale. In the early 1980s, Fannie Mae held billions in long-term loans in its portfolio, bearing interest rates in the low single digits. To finance them, it had to pay short-term rates in double digits, and the company was hemorrhaging cash.

From that episode, Fannie gained its reputation as an interest-rate-sensitive stock. "It used to be that Fannie Mae would either make \$5 a share or lose \$5 a share, depending on interest rates," Leifer notes. Indeed, many investors still subscribe to that theory, because a spike in the price of Fannie stock over the past few weeks corresponded with the falloff in interest rates.

Fannie, though, takes great pride in claiming that its earnings are



BRENDEL: THE NEXT FEW YEARS "WILL BE BIG"

nger quite so buffeted by the winds of interest-rate swings. Now, a two-percentage-point jump in rates would mean less than a 5% decline in earnings, according to Fannie Mae. "We've got the company on a very sound basis," says chairman David O. Maxwell. His boast early ain't hay: In 1988, despite a 2-point climb in short-term rates, earnings rose 35%, to \$507 million.

FROM UNDER. It was the tumbling of interest rates after 1982 that set the stage for Fannie's turnaround. Its huge inventory of underwater loans came up somewhere near face value, allowing Fannie to sell many of them off to pension funds and other institutions. That meshed with Maxwell's aim to pool mortgages and sell them as securities, rather than taking the risk of keeping the loans. That means depending less on interest income and more on fees. While Fannie is still adding some new loans to its \$99 billion portfolio, it tries to match long-term holdings with long-term borrowings. These changes leave Fannie less vulnerable to higher short rates.

Freddie Mac is faring well, too, though it's lagging slightly behind its older cousin. Yet, unlike Fannie, it has enjoyed steadily increasing earnings. From the start, it has taken the safer path of selling off, rather than holding mortgages. Over the past five years, it has more than doubled its profits, which rose to \$381 million in 1988.

Freddie Mac also stands to gain from congressional action. Although the pub owns its preferred shares, S&Ls and the Federal Home Loan Banks own all its common stock. And the three FHLB members are still its directors. But under the thrift rescue plan now in Congress, shareholders would elect most of an enlarged board. Distancing itself from the regulators, it could focus more on earnings. "This is the healthiest thing that could happen" to Freddie, says David W. Glenn, chief financial officer.

SHORT-TERM PRESSURE? To be sure, there are still risks in the offing. The thin capital margins on which both companies operate could be tomorrow's disaster. Fannie Mae and Freddie Mac must be sure that, as they cast about for new business, they don't acquire the enchant of some S&Ls for taking on high-rate but shaky loans. Freddie Mac, in particular, with its new freedoms, may come under pressure to buoy short-term profits. That's a course Brendsel vows to resist. "The biggest challenge is credit risk and loan defaults," he says. For the near term, however, the shakeout among S&Ls and other mortgage lenders is rolling on. And for as long as it lasts, Fannie Mae and Freddie Mac seem fated to gain.

By Catherine Yang in Washington, with David Zigas in New York

FANNIE MAE HELPS PUT A ROOF OVER THE NATION'S POOR

David O. Maxwell, chairman of the Federal National Mortgage Assn., believes that a company that does well also should do good. So with Fannie Mae now producing steady profits, he wants it to address one of America's most intractable problems: the scarcity of affordable housing.

Since 1986, his company has pledged more than \$2 billion to the cause through equity stakes in low- and moderate-income rental projects or investments in bonds and mortgages that benefit poorer homebuyers. "Fannie Mae is in this business to stay," vows Maxwell, who was vice-chairman of the National Housing Task Force headed by developer James W. Rouse. Informally, they now are serving as advisers

to school, he practiced law for eight years before serving as Pennsylvania's insurance commissioner and then as its budget czar. President Richard M. Nixon appointed him as HUD's general counsel in 1970. Maxwell later founded and ran Los Angeles-based Ticor Mortgage Insurance Co. and came to Fannie Mae in 1981.

Despite his concerns for low- and moderate-income housing, the button-downed Maxwell can't picture himself picking up a hammer and nails in the pursuit of housing rehabilitation, à la former President Jimmy Carter. Maxwell prefers to aid the cause through his corporate bully pulpit. "If I got a hammer in my hand, I would turn my thumb purple," he jokes.

Nor does his concern for the homeless impose discernible lifestyle sacrifices on himself or the company. Like many big-time CEOs, he plays an aggressive game of tennis, enjoys the opera, and vacations in such exotic locales as Kenya. Maxwell's Fannie Mae resides on Washington's Wisconsin Avenue in luxurious quarters, which employees call "the campus." And Maxwell has been



MAXWELL: PUMPING \$2 BILLION INTO LOW-INCOME HOUSING

ers to Housing & Urban Development Secretary Jack F. Kemp.

The company says it views its do-gooding effort as a business venture—eventually expecting some profitability. In the meantime, Fannie Mae benefits from tax breaks on its investments and will make money on the mortgages it buys if the homeowners do not default. As head of a congressionally chartered enterprise, Maxwell relies on the political support of Capitol Hill, where such efforts are good for the image. Says Mark J. Reidy, president of the National Council of Savings Institutions and a former Fannie Mae president: Maxwell "anticipates where public sentiment is going and [positions] Fannie Mae so it's where it ought to be when the questions are raised."

NO CARPENTER. A 58-year-old Philadelphia blueblood, Maxwell is a savvy politico who learned the ropes in state and federal government. Educated at Yale University and Harvard law

known to order linen cocktail napkins and other fancy touches for Fannie Mae receptions.

Still, his brand of corporate leadership does make a difference. Cullen Dubose, a minority developer in Detroit, spent seven years seeking an equity partner to convert an abandoned hospital into rental apartments for elderly, low-income tenants. Finally, he hooked up with Fannie Mae. Last year, Fannie Mae put up \$3.76 million in addition to Dubose's own \$1 million investment. The Highland Park Apartments are now close to full occupancy.

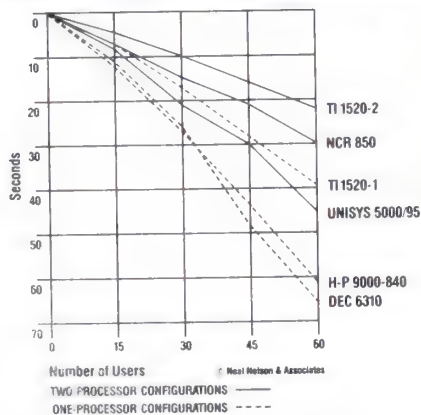
Maxwell realizes that corporate good intentions alone can't revive housing in America. That will take lots of energy—and substantial government aid. But if the current concern about affordable housing turns into a sustained national drive, Maxwell and Fannie Mae are well-positioned to play useful roles—and to reap the psychic and financial rewards.

By Catherine Yang in Washington

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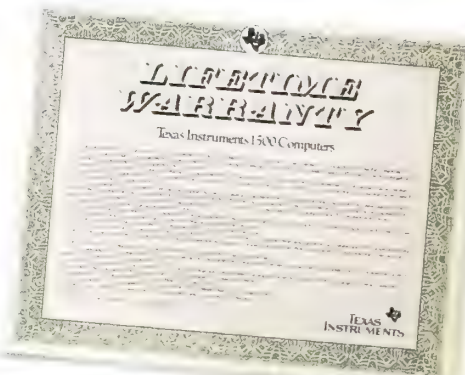
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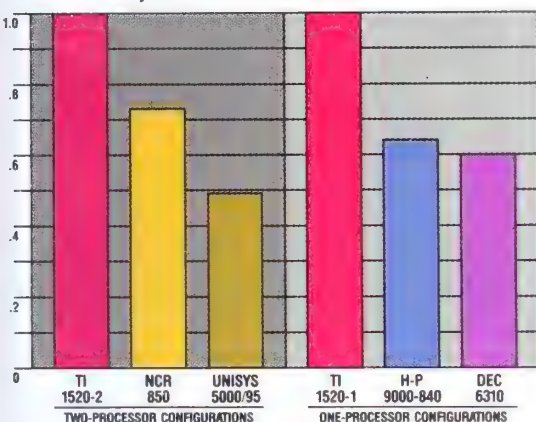
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TEXAS INSTRUMENTS

GOOD AS GOLD ISN'T SO GOOD THESE DAYS

Precious metals grow dimmer, while utility stocks shine

In the financial markets, as in physics, for every action there is an equal and opposite reaction. Rarely has that been more evident than in the markets' rendezvous with the slowing economy. Fueled by declining interest rates and ebbing inflation, equities have climbed to a 20-month high—and utility stocks, traditional beneficiaries of lower interest rates, have soared to their highest levels ever. But there is no rejoicing among investors in gold and silver, which have reacted to declining rates by plummeting to their lowest levels in three years.

And this double-edged trend is likely to continue, so long as interest rates remain in check. Gold and silver, the usual hedges against runaway inflation and a weak dollar, have been on the wane since Bloody Monday. Trading at \$365 an ounce on May 24, gold has declined \$45, or 11%, since the beginning of the year, and the more volatile silver has dropped 14%, to \$5.17 an ounce. Meanwhile, Standard & Poor's Utilities Index has risen 16%, outperforming the overall stock market.

Utilities are, of course, the standard fare of conservative investors, and their popularity as safe havens grew after the crash. One of the chief attractions of utility stocks are their dividends. High-grade electric utilities, currently paying 7%, now compare favorably with Treasury-bill yields. Telephone companies, which appeal to investors because of their involvement in the hot cellular-phone industry, also stand to benefit from the waning business outlook. "The stocks perform well in a time of economic slowdown," notes Edward M. Greenberg, who follows telecommunication companies for Morgan Stanley & Co.

HIDE AND SEEK. Although power companies have not done as well as the telephone stocks, the electricians are expected to shine if the economy continues to wilt. The reason is simple: When interest rates decline, costs decline for power companies that are borrowing to pay for their massive capital projects. "The whole issue of borrowing holds the group together," notes Thomas J. Serzan, who follows electric utilities for Gruntal & Co. Serzan recommends utili-

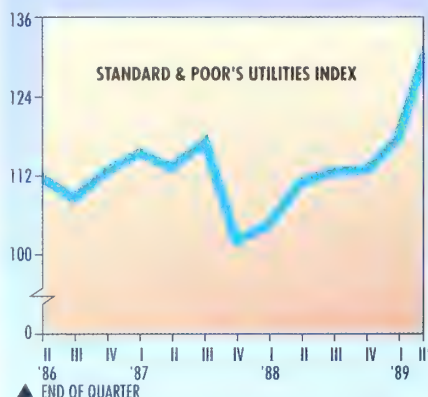
ties with strong performance and above-average dividend growth, including Consolidated Edison, Montana Power, PacifiCorp, and TECO Energy. Electric utilities also provide protection against an economic downturn or a market decline, making them a "good place to hide," says Suresh L. Bhurud, chief investment strategist of Oppenheimer & Co. He recently recommended that investors give above-par emphasis to electric utilities in their stock portfolios.

magnitude as the greenback's 8.5% rise. So strong is the dollar's drag that gold has been unaffected by usually positive influences. Analysts note that the unrest in China is the sort of political upheaval that normally causes gold to rally, but there has been no such impact.

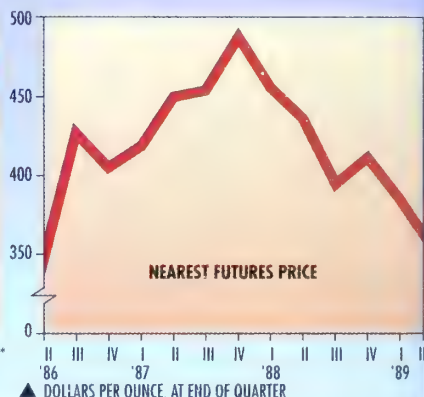
GOLD RUSH. Fear of oversupply of both gold and silver doesn't help either. Although industrial demand for silver has been increasing for six years, thanks to the electronics and photography industries and the minting of new coins, demand is too modest to offset increased production. U.S. silver output is up 17% so far this year, and gold production is also up strongly. "It appears that investment demand will have to rise at least 87% to balance" the market's increased supply, says Ted Arnold, London-based metals specialist for Merrill Lynch & Co.

And that probably won't happen. Bearish sentiment about gold has been deepening for some time, and though

WHILE UTILITY STOCKS POST NEW HIGHS...



...GOLD PLUMMETS TO A THREE-YEAR LOW



But gold bugs, it seems, have no place to hide. Aside from reverberations from the continued prospects for low inflation, the yellow metal's woes are worsened by the strength in the dollar. Gold long has followed the opposite course to the dollar. When gold began rising, after a long flat period in the fall of 1986, the dollar was slumping. And of late, the dollar's surge against the yen, the West German mark, and other currencies has been hammering gold's performance. In fact, gold's drop this year is of the same

gold prices have occasionally revived. "we keep seeing lower lows and lower highs," says Jeffrey N. Mosseri, an analyst at Goldsmith & Harris. With interest rates running well above inflation, investors want something that offers a return for their money. Even if inflation did loom and the dollar seemed likely to tank, it's uncertain whether there would be a gold rush. Hedgers might instead move into currency and interest-rate positions and futures.

For now, all but the most enthusiastic gold bugs feel that the precious metals haven't hit their lows. Analysts say silver could easily crash through \$5 an ounce and that gold could test \$350 an ounce. While there may be efforts to sustain prices, such as producers withholding supplies, gold and silver are likely to remain seriously tarnished.

By Troy Segal and Gary Weisman
New York

Although gold prices have occasionally revived, 'we keep seeing lower lows and lower highs'

**THIS IS A MOMENT
FOR A MACANUDO.**



After all, a man doesn't get promoted every day.

Some moments in a man's life are meant to be savored for all they're worth.

So is a Macanudo.

In an age when speed is all too often the order of the day, the men of Macanudo still take more than two years to turn the finest tobaccos in the world into the ultimate cigar.

And they still craft each cigar step by step by hand, just the way the first Macanudo cigars were made more than a century ago.

No wonder more and more men have come to realize that this is the cigar with the sweet smell of success.

This Father's Day, ask your favorite smoke shop for the box of Macanudo cigars that was made for you. And let any moment worth savoring linger in your mind with the taste and aroma of a Macanudo.



Montego Y Cia 1989

MACANUDO® *The Ultimate Cigar*

BY GENE G. MARCIAL

THERE'S PLENTY OF LIFE IN THIS OLD GRAY LADY

Buying shares in New York Times Co. could mean good news for investors, at least according to some pros who have been snapping up Times Class A stock. No, the Times isn't on the Street's takeover hit list, and for good reason. A trust set up by the late Adolph S. Ochs holds 23% of the Class A stock and 83% of Class B shares, which elect nine of the 14 directors. The trustees: Times Chairman and CEO Arthur Ochs Sulzberger, Ochs' grandson; his mother, Iphigene Ochs Sulzberger, and George Shinn, a Times director.

Nonetheless, some asset-value players find the diversified communications company, whose primary asset is *The New York Times*, a bargain. "The stock is selling at less than half of what we see as its underlying values," says investment manager Mark Boyar, who scouts for asset-rich companies selling at deep discounts. The stock is now selling at 30½ a share.

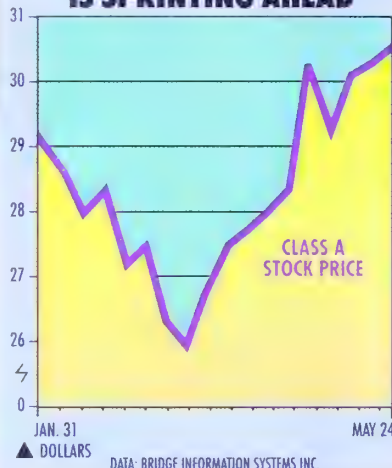
Boyar's estimate is based on the private-market, or breakup, value and excludes real-estate assets. The New York headquarters alone, he figures, may be worth more than \$100 million.

He says Times shares are trading at about seven times operating cash flow, or half the multiple that's attainable in private-market deals. Recent sales of newspapers, he notes, have been at 12 to 15 times operating cash flow. The company owns 26 daily and 9 nondaily smaller city newspapers mostly in the South and California, as well as 16 special-interest magazines, 5 network-affiliated television stations, and an AM/FM New York radio station. Times has sold its cable TV operations and agreed on May 22 to buy *McCall's* magazine for an estimated \$80 million.

Ken Berents, an analyst at Butcher & Singer, notes that the newspaper industry got hit with skyrocketing newsprint costs in the past two years. But he expects the profit squeeze to ease this year. True, Times posted poor first-quarter results, but Berents sees a brighter second half as retail and classified ads rebound. He projects earnings of \$2.25 a share in 1990 vs. an estimated \$1.90 this year.

Boyar, on the other hand, focuses on Times as an undervalued assets play.

NEW YORK TIMES IS SPRINTING AHEAD



Although the Ochs family controls a big chunk of the stock, he says, "one shouldn't rule out some divisiveness among the younger members of the family, down the road." He notes that about 40% of the more than 200 companies he has picked as asset plays have been acquired or restructured, no matter who controlled the stocks. You can't say that it won't happen at New York Times, argues Boyar.

Here's how he values Times assets: *The New York Times*, \$3.2 billion; regional papers, \$1.1 billion; magazines, \$260 million; broadcasting, \$132 million; other assets, including stakes in three Canadian paper mills and the *International Herald Tribune*, \$162 million; proceeds from the sale of cable TV operations, \$420 million; and cash, \$13 million. Total, minus debt of \$322 million: \$4.9 billion, or \$63 a share.

'BIG BUYING' AT ROHM & HAAS?

Rohm & Haas's stock has been lagging behind the rest of the chemical group. That might soon change, however. "Some big buying is going on, and the pros behind it are doing everything to shield their move," says one New York arbitrageur. The stock trades at 33, down from its yearly high of 37.

Whispers are that Centaur Partners has been buying shares through Goldman Sachs. Centaur is the investor group that tried to take over Pennwalt, also a chemical producer. Centaur lost out to Elf Aquitaine. Some put the breakup value of Rohm at \$60 a share.

But a hostile attack on Rohm will

prove difficult because 47.5% of the stock is controlled by the Haas family. The betting is that a friendly buyout may have already held talks with some of the big holders. "If Centaur is in the stock, it may have gotten wind of something about a merger or a buyout including an LBO," says a New York investment manager. A Rohm spokeswoman says nothing is going on in the Haas family has repeatedly expressed its commitment to the company and Chairman J. Laurence Wilson.

Sales growth at Rohm is expected to slow this year from last year's hot 15% rate, mainly because of the economic slowdown. Robert Reitzes, analyst at Mabon Nugent, estimates earnings of \$3.50 this year and \$3.80 in 1990 vs. last year's \$3.46. The stock is selling at a p-e of only 9.4 times 1989 estimate.

CHECKING OUT CHECKPOINT

Shareholders of Checkpoint Systems, a maker of warning and surveillance systems for retailers, may be tempted to sell now that the stock has jumped to 9 from 6¼ in April. That could be a foolish move, warn some pros.

Why? Money managers are buying shares on expectations that several major retailers will soon adopt Checkpoint's Counterpoint-Cheklink security system. Checkpoint uses microprocessor and radio-frequency technology in its security tags, which stores attach items. The device imbedded in the Cheklink tag can be scanned for the price of the merchandise at the checkout counter and activates an alarm in the event of pilferage. The system is being tested by 15 national retailers including K mart and Wal-Mart. Some supermarket chains already use Cheklink in their countertop and handheld scanners. Cheklink accounted for 10% of Checkpoint sales in 1988.

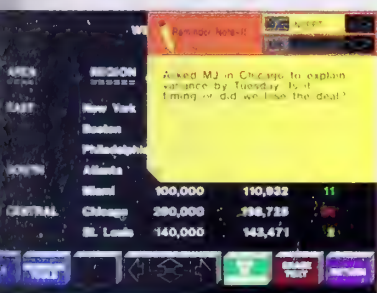
Revenues will jump once the big outlets start using Cheklink, says one New York investment manager. The company's earnings this year, he figures, will leap to 50¢ a share and to \$1 in 1990 vs. 12¢ in 1988. Earnings could go even higher, he says, because of a distribution agreement Checkpoint signed in mid-May with London-based Automated Security (Holdings) PLC. Checkpoint says the accord will produce sales of \$21.5 million in 1990. The new pact will give Checkpoint a strong presence in Europe, says Chairman and CEO A. E. Wolf.

E-Mail just became Executive-Mail

Commander™ EIS puts the power of PROFS™ at your executives' fingertips.

Commander EIS, the leading executive information system,* lets you take your company's pulse, literally with your fingertip. Using the ease of touch screen reporting, you get a complete overview of your business in seconds. Bulky briefing books and stacks of paper are transformed into concise, timely electronic reports tailored to meet each executive's personal needs.

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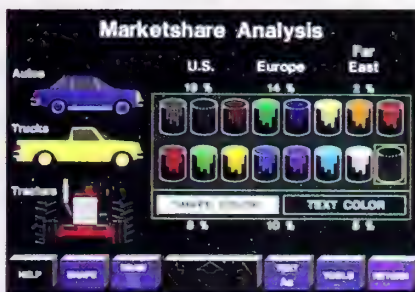
With Commander EIS's reminder capability you can rotate reports on-screen and file them for follow-up. Commander will remind you to review reports on the day you've noted. You can even store reports so updated versions are available when Commander prompts your review.



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*International Data Corporation's "Decision Support and Executive Information Systems: Markets and Trends" (Nov. 88) shows that Commander EIS is the leader with a 52% market share.

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Commander EIS runs on IBM mainframes using VM/CMS or MVS/TSO operating systems; and DEC VAX/VMS. Commander EIS Executive Workstations run on IBM PC AT, PS/2 and fully compatible computers with EGA and a mouse or a touch screen.

COMSHARE

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THE PERSONAL COMPUTER FINDS ITS MISSING LINK

New hardware and software are making networks the hottest ticket in the computer industry

For Donald F. Tuline, 1983 was a year to remember. He had just taken over as president of Richmond Savings Credit Union of Richmond, B. C.—and stepped into a crisis. His company was drowning in bad loans, the result of a slump in the fishing industry and a collapse in Vancouver real estate. But rather than cut back, Tuline decided to grow. His plan was to attract new business by charging for service according to a sliding scale that gave increasing discounts to his highest-volume customers. The problem was that the credit union's minicomputer software couldn't be fine-tuned to do the financial analysis needed to design the sliding scale, and Richmond Savings couldn't afford a larger system.

Tuline's solution was a personal computer network connecting 250 tellers in six offices. Although it cost \$1 million to install, that was at least 30% less than for a new minicomputer system, Tuline says. The new pricing scheme has increased service revenues by some \$429,000 annually

since it took effect in late 1987. But more important is the flexibility Richmond Savings has gained from a network. It writes custom software for itself, helps customers with their tax returns, and does its own direct mail promotions. And the PCs on the network are used for such routine office tasks as word processing. Now, Tuline says, "we're five years ahead" of competitors, who will

"have to bite a major bullet" install their own networks.

After years of fits and starts, PC networks are coming of age.

Like their big brothers, mainframe and minicomputer networks that run automatic teller machines or airline reservation systems, PC networks are capable of zapping information from one desk to another at lightning speed. But, as Richmond Savings learned, they also do more.

Now, increasing numbers of busi-

THE VERSATILITY OF PC NETWORKS...

- ▶ They make it much easier for employees to communicate by computer
- ▶ They thus save time by cutting down on meetings and enabling several employees to concentrate on the same problem
- ▶ They make it easier to digest larger amounts of information, letting a company react faster and generally be more competitive
- ▶ They improve the return on investment in computers by combining the use of the machines in new ways to solve problems
- ▶ They can cut software costs by eliminating duplicate purchases of programs

...PLUS THE LOWER COST OF PC-BASED SYSTEMS..

Sample cost for a network of 20 workstations using personal computers vs. terminals attached to a minicomputer or mainframe. The comparison assumes the same workload on similar jobs and that training time and productivity gains are equal between systems. Hardware: 33 MHz 80386 Personal Computer; Digital Equipment VAX; low-end IBM mainframe

PC network	\$9,000
Terminals tied to a minicomputer	\$30,000
Terminals tied to a mainframe	\$60,000

DATA: BW, COMMUNICATIONS NETWORK ARCHITECTS INC.

customers are making the same discovery, and they are turning networks to the hottest growth segment in the computer industry. Worldwide sales of network hardware and software jumped 15% in 1988, to \$4.8 billion, according to market researcher Dataquest Inc. Already, 15% of the 40.1 million PCs in U.S. businesses are linked together. By 1992, 47% of the 60.1 million desktop computers then in use will be networked, says market researcher International Data Corp. Companies that sell network hardware and software, such as Novell Inc. and 3Com Corp., are benefiting in a big way: Novell's 1988 sales rose 53%, to \$281 million, and 3Com's were up 61%, to \$252 million. Beyond that, networks boost demand for basic computing power—PCs, disk drives, and the like. That should help computer makers at a time when their growth has slowed

from double digits to less than 10% annually.

The current surge in network sales is being fueled by the arrival of critical hardware and software—and the expectation of more to come. Novell and 3Com are just now delivering updated network operating systems, the basic software that lets PCs work together. These programs take better advantage of the newest, most powerful PCs on the market.

THANKS FOR SHARING. That's just the start. On May 16, after an expenditure of an estimated \$500 million in just two years, IBM unveiled a series of software packages that for the first time will let PCs, minicomputers, and mainframes share information easily and work together on computing tasks. Industry watchers expect that the 1990s will bring a slew of more sophisticated net-

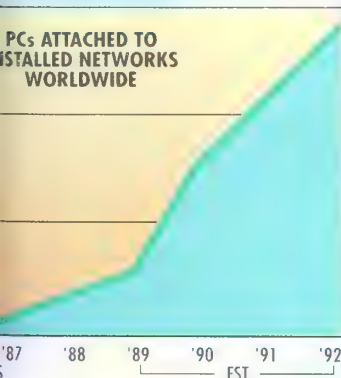
works that will transform the PC from what it most often has been in the past—a useful, one-person tool—into something much better. PCs will be a means for sharing vast amounts of information to more quickly solve problems or get new products out the door or respond to a competitor—in short, to improve productivity and the quality of goods and services. "We're talking about a world that's totally interconnected," says Robert W. Stearns, a vice-president at Motorola Inc.'s Codex communications-equipment unit. "We will take it for granted—the way we do the phone today."

Ultimately, networks will do a lot of work that humans will never see. With the right software, for instance, a sales manager working on a quarterly budget will be able to ask the computer to find a particular salesperson's results from the preceding quarter to plug into the spreadsheet. With the budget still on its screen, the PC will call across the network, find the right information, and place it in the correct column. The entire operation might take a few seconds rather than the hours or days

necessary to track information by telephone or with a request to the corporate computer staff.

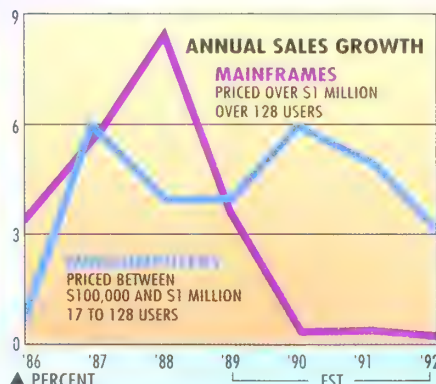
It's true that fully automated networks are at least a couple of years off. For now, many PC networks are still doing simple tasks, such as sending documents to a laser printer. Most networks won't do a lot more until networking companies quit bickering over whose approach is best and agree on some sorely needed technical standards that will let all types of networks communicate easily. Indeed, the lack of such standards has made it hard for software companies

...IS BOOSTING DEMAND FOR THEM...



DATA: INTERNATIONAL DATA CORP.

...AND HURTING SALES OF BIG SYSTEMS



Software Report

to produce applications software that will let networks achieve their promised versatility.

"Networks haven't [yet] lived up to their promise of making people smarter," says Larry V. Moore, general manager of Lotus Development Corp.'s Office Systems Group. "The software has lagged behind." In a survey done over the past year, Lotus customers overwhelmingly said they need better software to make their network investments more useful. Little wonder, then, that companies such as IBM, Lotus, and Microsoft have made networking a key strategy for the 1990s.

REPORT CARD. Producing the needed software is a tall order. The networked microcomputers of the 1990s will be able to do several jobs simultaneously because they'll have the power of a conventional minicomputer. And by definition, that means that the software for them will be a lot harder to write. After four years, for instance, Hewlett-Packard Co. is still at work on programs called "agents" that will take advantage of the PC's ability to do many things at once. An agent might automatically compile a report every time fresh sales data arrive and then distribute the report to the appropriate managers. "A lot of white-collar work is repetitious and routine," says Robert J.

Frankenberg, general manager of HP's Information Systems Group. "Agents can automate a good portion of that."

Agents are part of a broader HP project called NewWave, which provides IBM-compatible PCs with a graphic "user interface" similar to that of Apple Computer Inc.'s Macintosh. The program is the subject of a copyright-infringement suit by Apple against HP and its development ally, Microsoft Corp. But NewWave also has network functions that let applications programs written by different suppliers share data. So if one person on the network updates figures on a Lotus spreadsheet, a Software Publishing Corp. program that produces a graph of that spreadsheet on another PC would be automatically updated, too. Digital Equipment Corp. is working on programs with similar features.

The most important developments, however, are expected in data-base programs, the software that catalogs corporate information. That's where IBM has placed most of its effort. Its data-base program will be available on mainframes, minis, PCs, and so-called file servers—high-powered desktop machines that function as the repository for shared information in a network. Once network connections are in place, and when the right applications software is available about a year from now, a worker using an IBM PS/2 should be able to look for information anywhere on the network without having to know in which machine it is stored.

Software companies, too, are trying to get different-size computers to share information. One approach is a data-base program called SQL Server, developed

ules meetings, and tracks projects for everyone in a group. A supervisor could even use it to tell what employees are up to at a given moment, as long as they are using their computers.

Sometimes criticized for being an electronic Big Brother, groupware and other such programs have the potential to radically alter the way corporations are organized. Already, companies that rely on E-mail for internal communications are finding that the technology changes corporate behavior. E-mail becomes the main means of communication, a medium for circulating memos and discussing important issues. Companies say that E-mail eliminates some meetings and makes those that are necessary more productive since participants can confer electronically beforehand.

Mrs. Fields Inc., a chain of 650 cool shops based in Park City, Utah, also claims that its E-mail network has kept the organization lean and mean. Its network, which feeds business data back and forth between headquarters and the stores, has eliminated paperwork except for forms required by the U.S. government. The network also lets employees send complaints or suggestions back to headquarters. According to Chief Executive Randall K. Fields, that has flattened the corporate hierarchy and let management hear firsthand



COCA-COLA'S CURRID: USING ELECTRONIC MAIL TO REPLACE 'THOSE LITTLE PINK SLIPS'

jointly by Microsoft, PC data-base developer Ashton-Tate Co., and Sybase Corp., a maker of minicomputer data-base software. SQL Server connects the network's central computer to any PC that's running a data-base program. It also permits several workers to search for the same information simultaneously. Publishers of minicomputer data-base software such as Oracle Corp. and Relational Technology Inc. also are adapting programs to run on desktop machines.

Networking is also inspiring other new programs, the way the advent of the PC led to spreadsheets. One of the most talked-about developments is a category called groupware—programs that are aimed at improving communications within groups of workers (page 130). Built mostly around electronic mail systems, groupware keeps calendars, sched-

what's happening in the trenches. "Many companies would not want someone at the first level to be able to send messages to the chairman of the board," says Fields. But with this system, says, Mrs. Fields operates with just 11 headquarters employees—about one-fifth the staff his \$185 million operation otherwise would need.

CONSTANT COMMENT. E-mail also has become deeply ingrained in the corporate culture at DEC. After years of E-mail use by 98,000 employees in 33 countries, the DEC network, which uses both PCs and minicomputers, has become a social institution as well as a corporate tool. DEC networks include special forums that let employees share their thoughts on a variety of topics from politics to dating. DEC employees relocating overseas, for example, can prepare in advance

ping up a dialogue with DEC workers
ady there.

o enrich the conversation, workers
e even developed codes to express
otions. For example, a “;-)” in a mes-
e represents a wink and a “:-)” is a
vn. And because the electronic medi-
allows equal access to both big shots
the lower echelons, it encourages
kers to speak up. It’s like the em-
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ss forcefully on the phone, says M.
nar Talbert, a DEC customer-service
representative in Denver. “Multiply that
100 for electronic mail,” he says.

ike DEC, most companies that are
ing to tolerate a little noise say they
p big gains. Coca-Cola Foods has
rly 1,000 personal computers on net-
ks. The Houston-based Coke subsid-
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es, runs standard PC programs on its
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ong workers. “It’s marvelous,” says
eryl Currid, the company’s director of
died-information technology. “We
e literally eliminated those little pink
ne slips.”

ING IT RIGHT. And there are more sub-
stential benefits. For instance, Coca-Cola
ds uses a networked data-base pro-
m to schedule and monitor produc-
in seven plants across the U. S. This
r, the system will save the company
hillion to \$2 million, Currid estimates.
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ntify. But the company’s network
more fully automated Coke Food’s
ounting system, reducing the number
spreadsheets in use from 40 to 2.
e’ve given 25% of their time back to
financial analysts,” she observes.
ow do you put a dollar value on
t?”

urrid is convinced that networks are
key to realizing a sufficient return
nvestments in computers. Before her
pany switched to networks, most of
PCs were turned off much of the
e. “Now, if a person is here, his com-
er is on,” Currid says. She adds: “A
of [companies] say that their PCs
e not made them more productive.
the reason is that they didn’t do it
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oing it right requires a great deal of
ertise—and sometimes a healthy
e of old-fashioned skepticism. Compa-
s have many legitimate reasons to
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ldn’t proprietary and sensitive infor-
ion fall into the wrong hands? Could
petitors or hackers work their way
a network? Is it possible for employ-
to accidentally change data that
y’re not even supposed to be able to
?

he answers are yes, yes, and yes,

HOW TO CHOOSE A NETWORK

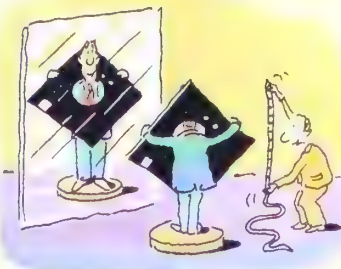
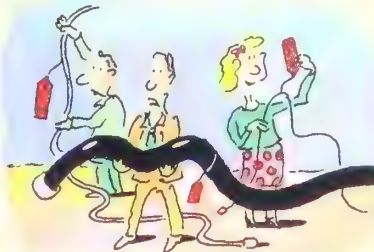
DECIDE IF YOU NEED ONE

If your employees spend more time swapping disks and trying to locate data than working on their spreadsheets, you need one. Networks won’t only improve communications between employees. They’ll also boost the return on your computer investment. Coca-Cola Foods in Houston noted a surge in PC use once its network was installed. A network doesn’t have to be a huge expenditure. A 20-workstation PC network will run about \$95,000, including operating system software and some applications software. Training costs are additional.



JUST BUY WHAT YOU NEED

If all you need is communication among workers in the same department or office, buy a local network. If you need to communicate off-site, you’ll want a wide-area network. Aetna Life & Casualty, for instance, has both. Whatever network you buy, be sure that several dozen independent software companies write programs for it—so you can get more sophisticated software later on.

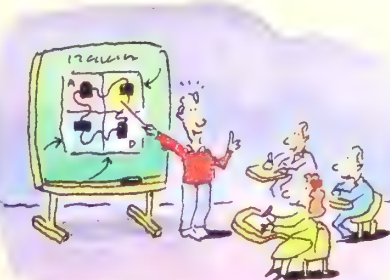


GET THE RIGHT SOFTWARE

Buying network versions of the software you use now can save money. For instance, if you have a 20-person network, but only six workers simultaneously use Lotus 1-2-3, you’ll pay for six copies even though all 20 employees can use the program. You’ll want one standard program for each application, such as word processing or accounting, so files can be exchanged. You’ll also need programs that can find files that are lost or damaged.

MAKE SURE SOMEONE'S IN CHARGE

You’ll need a network administrator who can do day-to-day housekeeping, monitor the system’s security, provide backup and recovery, perform maintenance, and establish training procedures. If a network becomes a political issue because of tensions over who controls the corporate data, you may want to hire from the outside. But you’ll also need a high-level executive to monitor issues such as network security. That’s why some companies have created the chief information officer position.

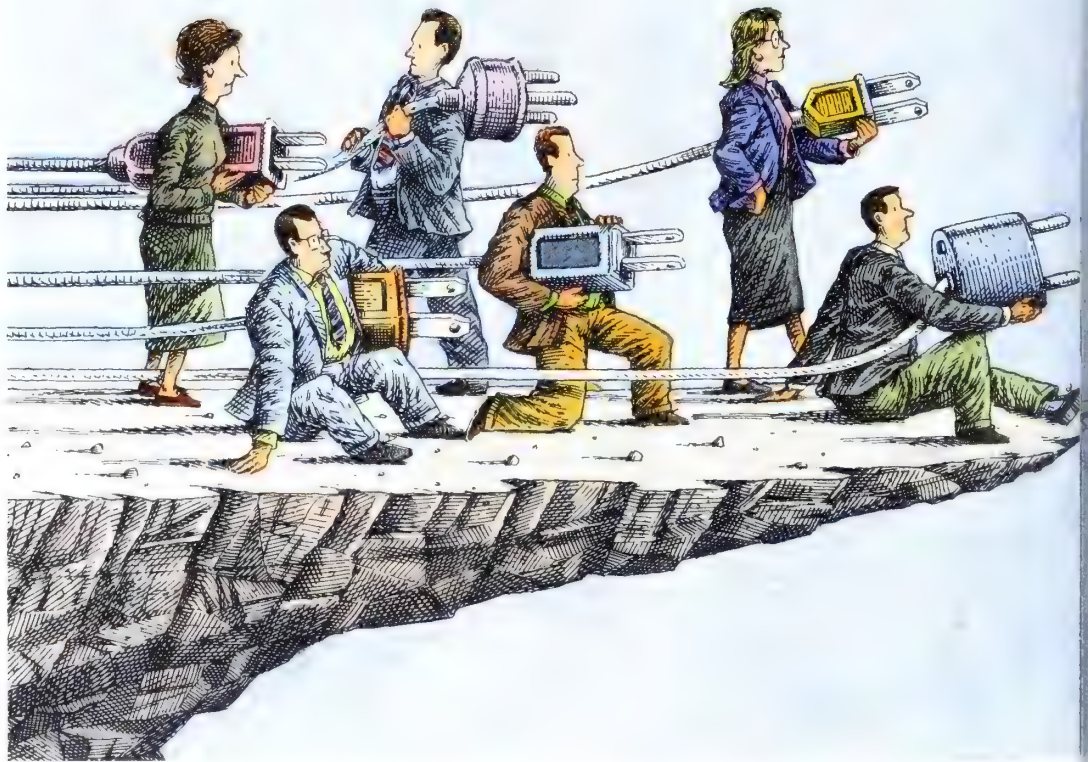


TEACH EMPLOYEES TO USE THE NETWORK

Without good training, you have nothing. Beyond that, identifying a proponent within each workgroup and giving that person time to work with others will improve acceptance of the system and may lead to good ideas on how to use it. A teller at Richmond Savings Credit Union in Richmond, B. C., customized the institution’s software so employees on any of 250 workstations get immediate access to the financial records of the credit union’s 40,000 customers.

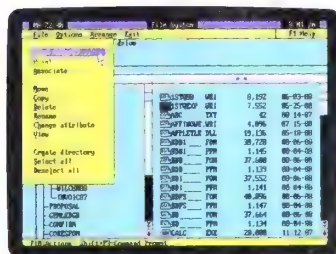
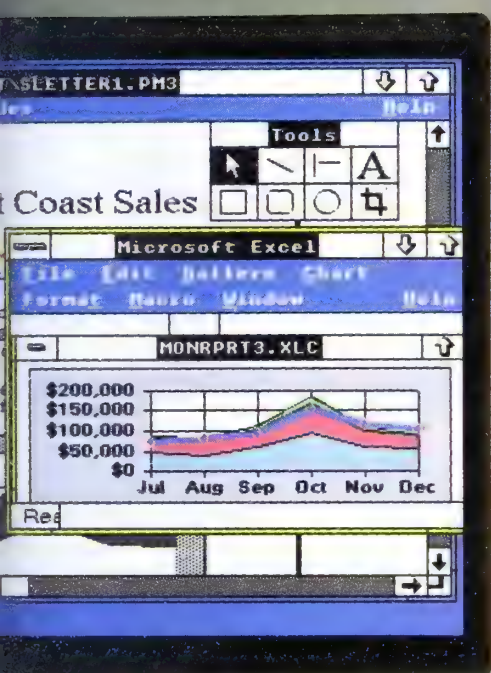
DATA: BW, AMERICAN TRAINING INTERNATIONAL

“How can we expect
our people to connect if
our computers can’t?”

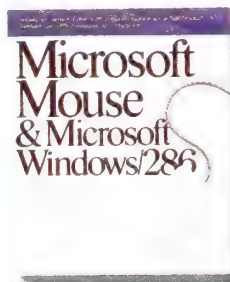


Push your software to the limit.

If you want to get the most out of today's new, high-powered software applications, we have a few words of advice:
Use a Microsoft® Mouse.



The Microsoft Mouse gives you easy access to all the powerful features today's software has to offer.



It looks innocent enough here, but wait until you see how the Mouse makes your software scream.

The Mouse can unleash your software—and take full advantage of the features intended to make your work easier.

With the Mouse you can effortlessly manipulate menu-driven applications without taking your eyes off your screen. You can pull down menus. Highlight text in one fell swoop. Copy, cut and paste formulas in spreadsheets easily. And move things from here to there without any command-key mumbo jumbo.

Literally hundreds of applications support the Mouse. But as the leading software developer for personal computers (and one of the first to bring a graphical interface to PC screens), we've gone a step further: Microsoft Windows/286 with PC Paintbrush® for Windows, Microsoft Paintbrush or EasyCAD™2 actually come with the Mouse (or vice versa).

Already, the Microsoft Mouse has made its way into the hands of over one million personal computer users. And that number is sure to grow even faster. After all, graphically oriented software is the driving force behind improved productivity.

But it's the Microsoft Mouse that puts you in the driver's seat.

Microsoft
Making it all make sense.™

Software Report

works take on voice, video, and other capabilities.

For now, however, the biggest barriers to better networking are technical. Increasingly complex basic software, such as the OS/2 operating system from IBM and Microsoft, have stretched development cycles for applications programs used on networks. Lotus' original 1-2-3 spreadsheet took five man-years to develop. By contrast, its latest sequel, release 3.0, already has taken 80 man-years. That's partly because the new spreadsheet will have to work with many machines on a network.

Even as they write such programs, moreover, software suppliers must sift through a confusing array of operating systems that are competing to become the single most popular standard for networking. Until a few, dominant standard products emerge, the cost of writing network applications will be excessive, since developers will have to write a separate version of their programs for each operating system.

That's what is slowing the arrival of applications software for networks. Networking companies such as Novell and 3Com even complain that some software developers are only paying lip ser-

'GROUPWARE': BIG BREAKTHROUGH—OR BIG BROTHER?

Long ago, it now seems, the personal computer revolutionized office work. But it was a solitary machine and empowered mainly individuals, not groups of people working together.

Now, the emergence of powerful office computer networks is raising hopes for a new class of software dubbed groupware, which promises to boost the productivity of entire teams of workers. Such programs would in theory improve communications between employees and coordinate their work activities. Says Robert Johansen, director of the New Technologies Program at the Institute for the Future, a Silicon Valley think tank: "The business team is becoming the basic unit of measure rather than the individual."

Just what groupware is is difficult to say. It's often described with such touchy-feely terms as "interpersonal computer" and "group dynamics." Yet the idea is

derived less from New Age psychology than from research funded by the Defense Dept., one of the earliest to recognize the power of computer networks. A simple example of groupware is IBM's For Communications age, which lets workers on a network annotate a text document without altering the original.

GET MOVING. More sophisticated programs offer a wider menu. Sharedata Inc. in Chandler, Ariz., sells INTO, a program that combines electronic mail, a group calendar, and other functions to keep everyone on a network organized. Coordination Technology Inc. in Trumbull, Conn., says its software would organize and coordinate small business or corporate departments. Due out in March of next year, it would route work through a customer's files from the receipt of an order, say, to the shipment of goods and billing. Relying on a network of personal computers, the program would constantly track tasks waiting to be done and notify the person responsible to get going. Enable Software in Ballston Lake, N. Y., has a program called Higgins that keeps a running log of an individual's work and appointments.



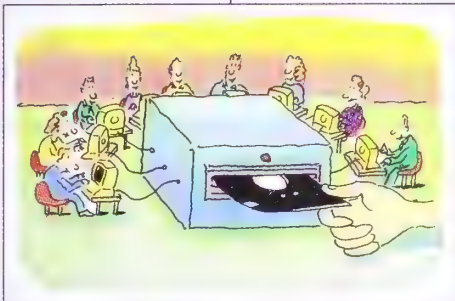
s can monitor what he or she is
er companies such as Apple
Sun Microsystems, and Hew-
rd all see groupware as a key
to pursue. "The most important
panies have is to improve com-
ms," says James H. Bair, manag-
groupware project at Hewlett-
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Customers
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Calif., requires excessive struc-
their interactions. The program
on work by company co-founder
do Flores, who believes that peo-
work together better if they
ach of their interactions using a
egories he developed. One might
message a "request for action,"

for example. Critics, though, call the pro-
gram "Naziware"—a stinging criticism
for Flores, who was jailed for three years
in Chile by Pinochet's right-wing regime.
The company says a new version imposes
less structure.

For the most part, however, groupware
is more benign, and better technology is
helping it to fulfill its promise. Timbuktu,



a program from Far-
allon Computing, en-
ables two Apple
Macintosh comput-
ers on a network to
display the same in-
formation on their
screens, even as it's
being changed. And
Xerox Corp. wants
to add video to its
groupware system,

so people can see each other as they work
together.

The real hurdle may simply be under-
standing how people interact. And that,
most likely, will take time—and some in-
spired groupthink.

*By Rich Brandt in San Francisco and John
W. Verity in New York*

vice to networking. "They're focusing on
stand-alone processing because it's what
they do best," says Darrell L. Miller,
executive vice-president at Novell.
"They're not as network-aware as we
would like." Part of the problem is that
producing a good network package
sometimes requires starting from
scratch. For instance, Microrim Inc.
spent three years creating its Atlas data-
base program for networks.

Still, buyers of networks are starting
to get more of what they need. "A year
and a half ago, we used to call and beg
for network applications," says Coca-Co-
la's Currid. "But it's getting much bet-
ter now." So the momentum is starting
to build. It may take a decade for net-
works to deliver the miracles they've
promised, says Raymond J. Noorda, No-
vell's CEO. But he sees a day when ex-
tremely versatile networks will do auto-
matically many of the things that
humans now have to tell computers to
do. Adds Noorda: "They'll talk, see, and
almost feel."

*By Richard Brandt in San Francisco
and Deidre A. Depke in New York, with
Geoff Lewis in New York, Keith H. Ham-
monds in Boston, Chuck Hawkins in To-
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CABLE MOGUL'S DANCING DANCE ON THE HIGH WIRE

With debt at Cablevision piling up, Chuck Dolan just keeps on buying

Cablevision Systems Corp. CEO Charles F. Dolan isn't afraid to pick a major-league fight. When f & Western Inc.—which is 10 times larger than Cablevision—recently outbid an for the rights to New York Yankees telecasts, Dolan dug in his heels.

ly made several expensive and risky deals that put his company and his prestige on the line. He's betting that cable will keep growing and that Cablevision will lead the field in its two major businesses—as an operator of cable franchises and a provider of programming.

Angeles. Cablevision, which is based in the Long Island town of Woodbury, N. Y., also announced plans to launch a sports programming service for Ohio.

TURF WARS. Dolan, 62, will be in deep trouble if business doesn't keep growing at a healthy clip. Cablevision is a money-losing operation with huge debts. Dolan has more than doubled Cablevision's borrowings in the past two years, to nearly \$1.3 billion, to buy up properties (charts). The 1988 interest payments nearly match his \$140 million operating cash flow. With rising expenses and depreciation, Cablevision went from an operating profit in 1987 to a loss of \$11.5 million on sales of \$493 million last year.

All of Cablevision's operating losses come from its programming services, where new competitors are fighting for the same turf—especially in sports. Cablevision owns SportsChannel America and seven regional SportsChannel services that buy the rights to broadcast hockey, football, and other games. Over the last few months, Ted Turner and TCI's Malone have announced separate plans to launch regional sports services. Meanwhile, Cablevision's two film networks—Bravo and, in a partnership with TCI, American Movie Classics—also face new rivals, such as Turner Network Television Inc. (TNT).

Dolan is untroubled. "All I'm watching is cash flow, and that's improving every year," he says. Shareholders seem to like Dolan's course. Cablevision's Class A shares went public in 1986 at \$14.50. They now sell for about \$41—

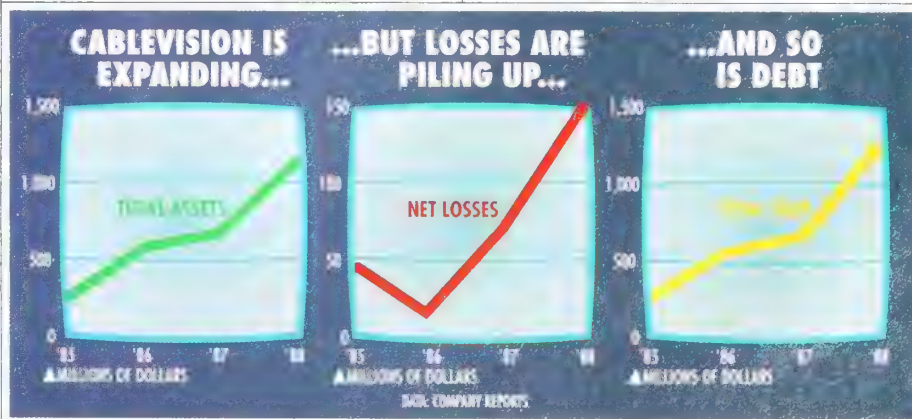


DOLAN: BRIGHT IDEAS, WELL-HEELED BACKERS—BUT YANKEE FANS ARE ANGRY

Cablevision Systems dropped G&W's Madison Square Garden Network (MSG) to protest the higher rates MSG wants to charge for adding Yankees coverage. Then, Dolan kicked sand in G&W CEO Martin S. Davis' face: To explain Cablevision's position to the 500,000 New York-area subscribers who will miss the games, Chuck Dolan ran ads saying that Marty Davis "wanted to 'steal home' your money."

The strategy may backfire. Some state and local consumer advocates are threatening to go to court or seek regulations that would force Dolan to relent. But Dolan is unmoved by the critics: "They feel that Cablevision won't be able to withstand the pressure. They're wrong." Dolan is used to taking challenges. "He's an innovator, and he's as tough as hell," says John Malone of Time-Warner Communications Inc. (TCI), the country's biggest cable operator. Dolan had better be tough. He recent-

Dolan boosted his clout in April, when he forged a programming partnership with NBC Inc. He has also gone on a borrowing and buying binge. In the first few months of 1989, he paid about \$549 million for some franchises owned by Viacom Inc., and an additional \$18 million for a regional sports channel in Los



close to the all-time high of \$43 hit in April. But Dolan doesn't have to worry about pleasing outside shareholders. His family owns nearly all of the Class B shares—which gives Dolan the power to pick nine of Cablevision's 13 directors.

Investors recognize that Dolan thinks big. Some industry sources say he's even trying to find partners to help him make a bid for Time Inc. Dolan says he never confirms or denies such stories, but he's clearly interested. "We've been looking, but no more than anyone else," he says. If Time were on the block, "there are parts we would love to have." Indeed he would—the two cable programmers and operators have a lot in common. Cablevision is the country's eighth-largest franchise owner, with more than 1.3 million customers in 11 states—mostly in the Northeast and Midwest. Separately, Dolan runs cable operations in Boston, Chicago, and parts of New York City.

Dolan built his empire by paying the

going prices for franchises and then marketing his services to the hilt. These tactics often work. The typical Cablevision customer buys two premium channels and pays about \$34 a month. That's the highest average in the industry.

DROPOUT. It's easy to understand why Dolan is so keen on cable. The industry made the Cleveland-born entrepreneur a wealthy man. Not bad for a guy who dropped out of Cleveland's John Carroll University and began his career producing radio shows. In 1952, Dolan decided to move to New York City to work for a company that sold news footage to the TV networks. By the early 1960s, he thought he could make a buck from advertisers who wanted to reach the visitors cramming New York's hotels. He provided the hotels with cable services and used some channels to post information about convention events and tourist attractions.

When the business proved to be un-

profitable, Dolan tried another tack. He sold cable services to New Yorkers who found it difficult to get a clear TV picture amid the city's skyscrapers. In 1963, the city awarded Dolan a franchise to wire lower Manhattan. But Dolan was still losing money by the 1970s. It was then that he hit upon an idea that revolutionized cable: Dolan offered viewers shows that they could only get on cable, including recent movies and special sports events. And he charged them for it. The service became Home Box Office Inc. Time bought HBO and the New York system in 1973 and sold Dolan some Long Island franchises that he used to found Cablevision.

These days, Dolan has plenty of backers with deep pockets. General Electric Capital Corp. has backed his biggest deals (box). As Dolan's investment banker, Drexel Burnham Lambert Inc. has helped Cablevision raise \$162 million and placed a representative on the com-

WHY GE IS FIRING UP ITS CABLE CONNECTION

The lenders at General Electric Capital Corp. have bagged a lot of big game in cable TV since September, 1986, when they formed a special group to hunt for deals in media and communications. By the end of 1988, the General Electric Co. subsidiary was the country's second-biggest lender in cable, after Canada's Toronto-Dominion Bank, according to analysts at Paul Kagan Associates Inc. GE Capital's Corporate Finance Media & Communications Group provided about \$1.2 billion in 1988 to cable buyers and builders—and they're off to a fast start this year. Why so much activity in a single year? GE Capital says it's because cable has offered some great deals.

But a number of cable financiers have a different explanation: They believe GE Capital's deals are designed to turn GE into a major force in cable. GE Capital's sister company, NBC Inc., recently launched a cable channel and formed a programming partnership with Cablevision Systems Corp.

The GE Capital investments could give GE an entry into cable operating systems. The company has backed such active buyers as Robert M. Bass, partners I. Martin Pompadur and Elton Rule, and Cablevision's Charles F. Dolan. To secure the riskier loans, GE Capital has taken equity in their cable properties. The terms even allow the

GE CAPITAL'S GROWING STAKE IN CABLE

The subsidiary of General Electric has pumped more than \$1.6 billion into financing cable deals since January, 1988. Among them:

CABLEVISION SYSTEMS \$755 MILLION

In two separate deals, Chuck Dolan's company bought the Adams-Russell cable operations in seven Midwest and Northeast states and Viacom's suburban franchises on Long Island and around Cleveland

U.S. CABLE TELEVISION GROUP \$378 MILLION

A partnership run by Martin Pompadur and Elton Rule picked up Essex Cable and C4 Media Cable, a collection of mostly rural systems in the Southeast and Midwest

GEORGIA CABLE HOLDINGS \$270 MILLION

The Robert M. Bass Group affiliate bought two cable properties in Atlanta's suburbs

STAR CABLEVISION GROUP \$235 MILLION

The Minnesota-based cable company acquired five small cable systems in the rural Midwest

DATA: GENERAL ELECTRIC CAPITAL CORP.

lender to take over some franchises if borrowers don't meet ambitious financial goals. "A hiccup here and a hiccup there, and you could lose your company," says one investment banker.

GE might run into regulatory problems if it tried to operate a franchise on its own. Because it owns NBC, there's a possibility that GE is covered

by federal rules that prohibit TV networks from controlling cable systems. The networks are lobbying to have the restrictions dropped.

GE Capital's connections may have already helped NBC. Cablevision's Dolan, for one, assumes that his relationship with GE Capital made it easier for him to form his partnership with NBC. "By the time NBC came up, GE Capital was already lending us \$800 million," he explains. "I'm sure that when [NBC CEO] Bob Wright spoke to [GE CEO] Jack Welch, he had already heard of Cablevision." GE Capital and NBC deny direct ties between their deals.

DEBT GALORE. Indeed, GE Capital wants to avoid any appearance of special relationship with NBC. "We don't keep them separate, other clients won't come to us," says George V. Grune Jr., the executive vice-president who manages GE Capital's Media & Communications Group. He adds that GE Capital offers creative packages and a unique one-stop service that provides everything from senior debt and subordinated debt to preferred equity.

It's hard for outsiders to guess whether GE wants more than interest income from GE Capital's deals. But it doesn't take an insider to figure out that Jack Welch is placing some of GE's biggest bets on cable's future.

By David Lieberman in New York

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ny's board. Dolan proved to be a faithful Drexel ally in March, when he signed a newspaper ad in support of Michael R. Milken after the junk-bond king was indicted for securities law violations.

Dolan has won this strong financial support despite earlier setbacks. In 1985, he lost his 47.5% stake in a Sacramento cable franchise after failing to meet a \$34 million obligation to his partner, Scripps-Howard Broadcasting Co. Dolan

is still losing money at the Boston franchise his private partnership won in 1982. City officials have taken him to court claiming that he breached his license agreement by raising cable rates and failing to complete the system by the end of 1988. Another money-losing partnership also fell behind schedule in its plans to provide service for the Brooklyn and Bronx franchises that Dolan won in 1979.

SETTING CABLE FREE: DID CONGRESS UNLEASH A MONSTER?

When Congress passed the law that cut cable TV loose from regulation beginning in 1987, lawmakers were responding to pleas from an industry that feared for its survival. Now, legislators are wondering whether they unleashed a monster. Rates for basic cable—the most minimal service available—rose nearly 20% in 1987 and 10% in 1988 (chart). Policymakers also are concerned about the growing concentration of power in cable. The top five operators feed 42% of the cable market, which now includes more than half of all TV viewers.

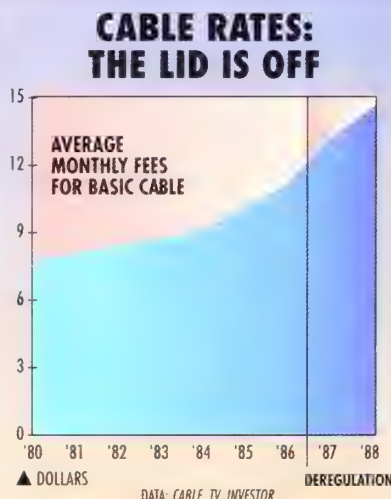
As constituents' complaints pile up, members of Congress have proposed about a dozen bills designed to protect subscribers. The list of supporters for reregulation includes such Senate veterans as Wendell H. Ford, Howard I. Metzenbaum, and Albert Gore. "It's time to put some competition back into this industry and put some brakes on the skyrocketing rates," says Gore. His bill, introduced on May 17, would allow cities to reregulate prices, make it easier for telephone companies to enter the business, and require the Federal Trade Commission to investigate concentration in the cable industry.

TAKEN FOR GRANTED. It's easy to see why consumers are rebelling. Many TV addicts now consider cable an essential expense. They look at the hefty rate increases companies are asking and disbelieve claims from the industry that it needs more money to improve services. Sports fans are finding that some professional games that were once shown for free are now available only on cable—and in some cases only from premium channels that require additional monthly payments.

There's also a growing suspicion that when operators decide which programming services to buy, they favor business partners and ignore what

viewers want. It's hardly a fringe view: Viacom Inc. made the charge in a suit it filed on May 9 against Time Inc. The suit claims that Time used its collection of cable franchises—the country's second-largest—to promote its premium channel, Home Box Office, at the expense of Viacom's Showtime. Time calls the charge "totally baseless."

Congress will probably act slowly in



dealing with the reregulation proposals. When they do address the issue, legislators may tack on provisions that favor broadcasters: Independent and public TV stations want a guarantee that they will be carried on local cable systems. Broadcasters want assurances that they won't be condemned to the Siberia of the cable dial—those channels where viewers rarely flip.

Reregulation isn't quite yet an issue whose time has come. But the momentum has shifted away from the cable operators. Legislators are waiting for evidence that deregulation wasn't a big mistake.

By Tim Smart in Washington

Dolan's public relations in New York City suffered a bigger blow when he locked horns with G&W over the Yankees. The dispute began in November, when MSG won the right to air 75 Yankee games a season in 1989 and 1990, followed by 150 games a year through 2000. After several meetings, Dolan and Davis couldn't resolve their differences.

The problem? MSG, which is supported by advertising, wants operators to include the channel as part of the basic service available to all cable customers. Dolan wants to sell MSG as an extra-cost premium channel, similar to HBO. Dolan says he's fighting for freedom of choice. All his customers would pay higher rates if he agreed to MSG's terms. But MSG says Dolan wants to hurt MSG, even if it means penalizing Cablevision customers. Every other cable operator in the New York area has agreed to put MSG as a basic service. Cable executives across the country fear that the controversy will reverberate far beyond New York. Industry critics could point to the dispute to illustrate why cable needs to be reregulated (box).

NEW NEWS? Reregulation would put a strain on Dolan as he tries to keep his expansion drive. At the top of his growth plans is his new partnership with NBC. In a deal worth more than \$300 million, the network picked up half-ownership of Cablevision's programming operation and ad sales business. In return, Cablevision got \$140.5 million and nearly half of NBC's new cable venture, Consumer News & Business Channel (CNBC). Dolan also gets rights to broadcast some events from the 1992 Summer Olympics over cable on a pay-per-view basis.

NBC and Dolan believe they can help each other form a tempting smorgasbord of local cable services. The partners' regional SportsChannels should benefit from the expertise that NBC has acquired in years of producing important sports events. NBC also thinks it can drum up some new business by helping Cablevision launch additional local news services on cable. The network believes its stations and affiliates will get to make extra use of their reporters and producers to supply stories for cable. NBC and Cablevision could find themselves loaded with opportunities to bring local news to cable if their conversations with Malone result in new joint ventures at TCI's franchises.

With so many ideas and well-financed backers, Dolan would seem to have no room for error. But in his high-debt world, there's not much room for error. Dolan's cable empire will soon have to start generating strong profits. Otherwise, Dolan could anger more than Yankee fans.

By David Lieberman in New York



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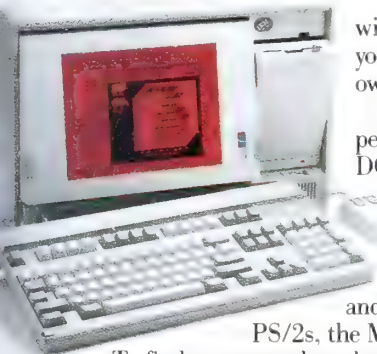
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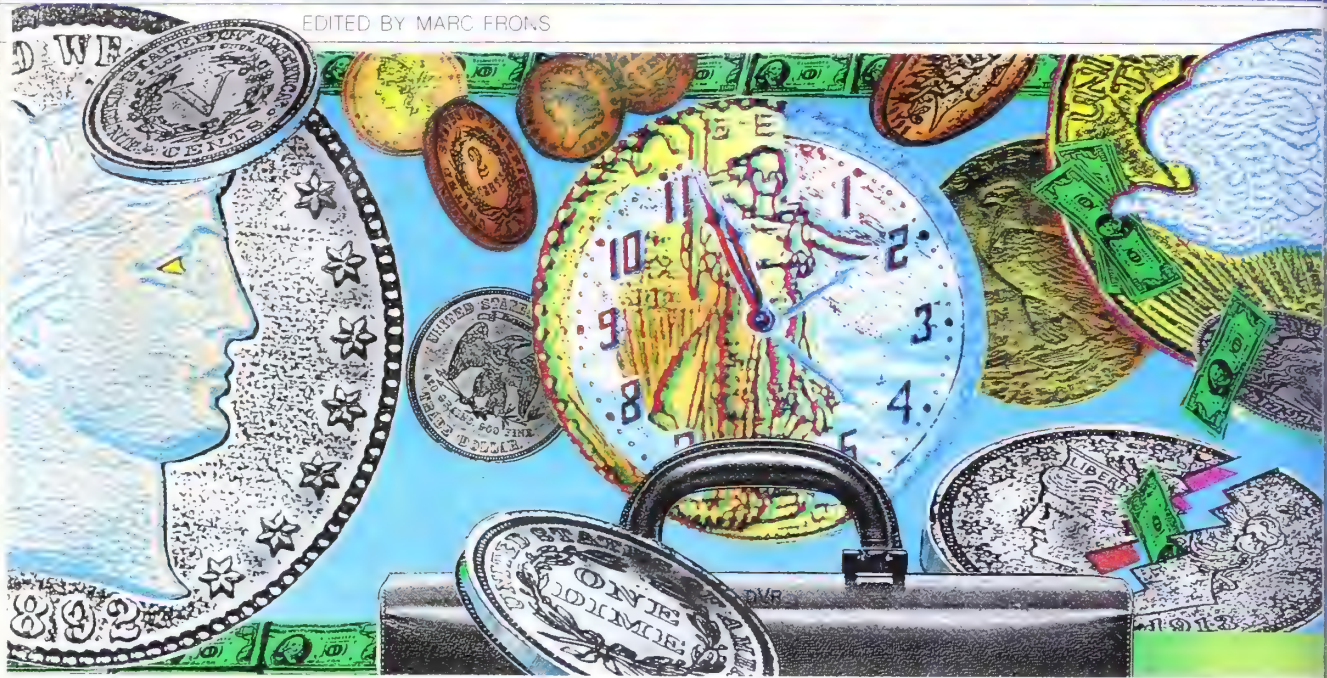
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Investing

CAN YOU MAKE A MINT BY INVESTING IN OLD COINS?

When it comes to coins, investors usually go for bullion coins, modern issues that serve as a substitute for owning bars of gold or silver. Numismatic coins—the old, rare specie of an earlier era or century—have been left to collectors. But now the numismatics are coming into their own, and coming on strong.

Since January, prices for high-quality coins have increased 56%, according to the *Numismatic News* index, which tracks 17 categories of coins. Many individual issues have doubled, dealers say.

What's fueling the rise? Not precious metals prices, which have declined so far this year. Instead, it's the advent of what the coin community is calling "Wall Street money." Kidder Peabody recently launched a private limited partnership, the \$40 million American Rare Coin Fund. Last February, Merrill

Lynch closed Athena Fund II, a public LP that invests in ancient Greek and Roman coins. And numismatic dealers say several other investment houses, including Shearson Lehman Hutton, are interested in trading coins for clients.

At first glance, it seems compelling to follow the brokerages' lead: Over the past 15 years, coins have gained about 15% in value a year, according to Salomon Brothers, whose annual ranking of tangible assets is a much-quoted measure among coin marketers. But there can be a big gap between paper gains and the gains investors can actually realize. Although the industry has worked to standardize prices, numismatic coins remain more of a privately traded collectible than an openly marketed security. "Just because a table says: 'Coins appreciated 15%,' doesn't mean you could have gotten that," says Robert Salomon Jr.,

Salomon managing director.

In the first place, there is a staggering variety of numismatic coins—from ancient Greek and Roman to 19th century American to modern commemorative—and they don't always perform the same way. The current boom is occurring mainly in very specific areas: U.S. gold and silver commemorative coins, \$2.50 to \$20 gold pieces, and silver Peace or Morgan dollars—all of mid-19th to mid-20th century vintage.

OUT OF POCKET. The rally is also confined to coins in the most pristine, uncirculated condition—the ones graded Mint State-65 and to some extent MS-64 and MS-63. "Coins in circulated condition are not moving at all," says Joseph Battaglia, chairman of Gold & Silver Financial Group, an Encino (Calif.) dealer. Grades can make thousands of dollars' worth of difference. An 1881-O Morgan silver dollar is

worth about \$5,000 in MS-64 condition but only about \$1,000 in MS-63 or \$125 in MS-60.

In the past, inconsistent grading was the single biggest drawback to investing in rare coins. Not only do evaluations vary from dealer to dealer but they also vary with the buoyancy of the market: When sales were booming, coins would be subject to grade inflation.

Since 1986, such abuses have decreased with the advent of third-party grading services, which grade a coin and seal it in a plastic holder or slab. The best-regarded are Professional Coin Grading Service, Numismatic Guaranty, and the American Numismatic Assn. Certification Service. Together, they have hundreds of dealer-subscribers, who agree to accept the assigned grade.

It's the stability provided by the services that has aroused investment houses

OLD COINS: A FORMIDABLE SPREAD

	Sell price	Buy-back price*
Morgan silver dollar, 1881-5	\$ 600	\$ 430
California commemorative silver half-dollar, 1925-5	2,172	1,800
St. Gaudens \$20 gold piece, 1908-1928	4,800	4,000
Indian gold \$2.50 Quarter Eagle, 1908-1929	13,000	10,000
Seated Liberty silver half-dollar (no motto)	88,000	63,000
Bust silver quarter, 1804-1807	113,500	81,000

*All coins are graded MS-65

DATA: COIN DEALER NEWSLETTER, NUMISMATIC NEWS

est in numismatics: "The market has become much of a commodities market," says Scott Travers, a New York dealer and author of several investors' guides. "Today dealers now make unseens bids for 'slabbed' coins on electronic networks, establishing in effect a new floor."

NOT? But just because a dealer has to accept a grade doesn't mean he has to accept the price. What you buy a coin for and what you can sell it for is still pretty much at the dealer's discretion. Although slabbing has eliminated huge losses because of grading disputes, investors are essentially buying and selling wholesale—buy/sell spread.

Reputable dealers offer a refund period of two to

four weeks for most coins. But always ask: "Will you buy this back after that? And if not—why not?" says Keith Zaner, *Coin World* editor. Obviously, dealers can't guarantee a price for a particular coin, but they can give you a sense of what the current spread is and how constant that spread has been in the past. "It should be no greater than 25% to 30%," says Barry

Stuppler, chairman of the dealer accreditation program of the Industry Council for Tangible Assets.

Still, given that a coin might have to appreciate 25% before you break even on it suggests that "if you want to sell in two weeks, you're either making a big mistake or want to be a big speculator," says Jim Blanchard, a New Orleans metals dealer. Expect

to hold for three to five years—or longer, depending on the market cycles. For example, John Ramsey, an Atlanta obstetrician, paid \$30,000 for a proof set of 1884 silver coins in 1980, when inflation fears sent numismatics soaring. Today, it would fetch 10% less. "But it will come back," says Ramsey. "Coins that old can only get rarer and rarer."

Since rare coin supplies are finite, their value ultimately will increase. But realizing those increases is another story. Without an open market or pricing system, investors can only work through professional dealers, whose first priority isn't to cut you a good deal. Coin collecting is an ancient and honorable hobby. But coin investing can be a risky business. *Troy Segal*

After all these years, you might think golf-equipment companies would have found a way to make the game easy. They haven't. But this year, there are a few notable new products that could make golf a little more enjoyable. The year's hottest club is the Hogan Edge iron, made by Hogan Co. Order now for a set of nine) and you'll have to wait several weeks for delivery. Like the immensely popular Ping Eye2, made by Karsten Manufacturing, the Edge has a hollowed-out "cavity back," which disperses the club's weight around its perimeter. This widens the "sweet spot" and helps you hit shots go straight. Unlike most cavity-backed clubs, the Edge is made with forged steel—not investment-cast steel. Forging produces a softer metal, which many golfers prefer because of its better "feel." In other words, it's easier to tell you've hit the sweet spot. For players who miss the sweet spot more often than hit it, Mizuno has a club worth trying: the C-35 (\$1,400 for three woods and eight irons). Its hitting area is 35% wider than a normal club's be-

Golf

PUT MORE ZING IN THAT SWING, WITH THESE HOT NEW CLUBS

cause the club head is larger than usual—like an oversized tennis racket. While the club looks pretty intimidating, it's actually easy to swing. That's because the irons are made of forged titanium, and the woods are made of cast magnesium, both of which are

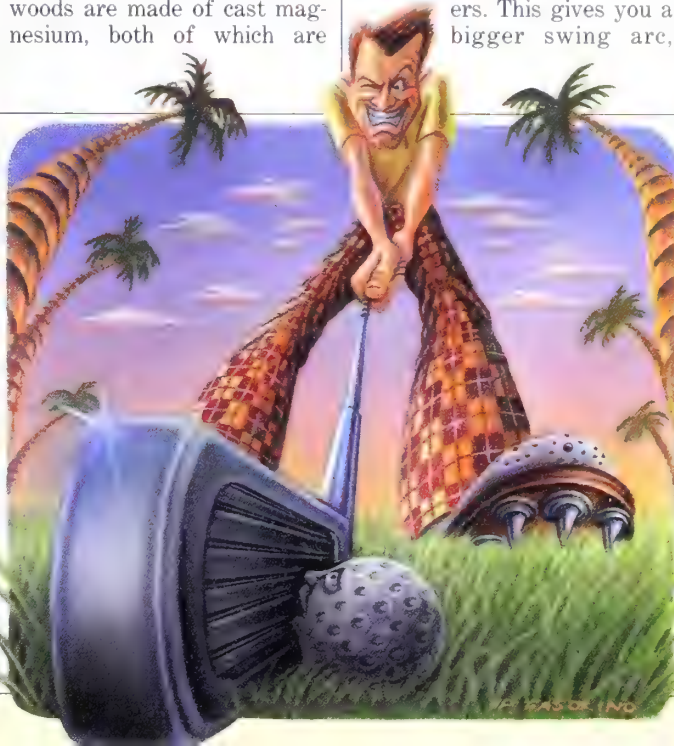
lighter than traditional steel.

Yonex has taken this idea one step further with its ADX driver (\$240). Not only is its club head 15% bigger than usual but the shaft is two inches longer than most drivers. This gives you a bigger swing arc,

and extra distance. Of course, a bigger swing arc also increases the chances of an off-center hit. That's one reason the club head is oversized—its face has a 20% bigger sweet spot. And because both the shaft and the club head are made of graphite, the ADX weighs less than most.

SHEER ODDNESS. That's a novel approach, but for sheer oddness it has nothing on the new Tommy Armour EQL clubs (\$1,000 for three woods and nine irons). In a normal set, the clubs for hitting a ball the farthest have longer shafts than the ones for shorter shots. Not so with EQL. All its irons are the same length as a 6 iron, and all its woods are as long as a 5 wood. Only the angle of the club face and the club head's weight are different.

The logic: Beginning-to-average golfers often overswing with their longer clubs and hit the ball poorly. Armour figures that keeping all the clubs the same length eliminates this problem. And you don't necessarily lose distance with its shorter clubs: Since the heads on the long-hitting clubs are heavier, average golfers can hit the ball about as far with EQLs as they do with conventional clubs. *Peter Finch*



Smart Money

BATTLING YOUR BROKER JUST GOT A BIT EASIER

The Securities & Exchange Commission says it has just given you another leg to stand on should you have a dispute with your broker. But some critics contend that it's a wobbly leg at best.

On May 10, the SEC approved a number of changes to improve the arbitration process between brokers and their dissatisfied customers. The most visible change mandates that securities firms now highlight a standard clause in the statement you sign when you open an account.

This clause, usually associated with option and margin accounts, typically appears in fine print. It says that if you decide to challenge your broker, you give up the right to take him or her to court and must settle your

tration? In many cases it's cheaper and simpler than dragging a brokerage firm to court, especially if it's a small claim. But the right to appeal is limited. And the process is overseen by the National Association of Securities Dealers and the stock exchanges, so critics charge that this self-policing discriminates against investors.

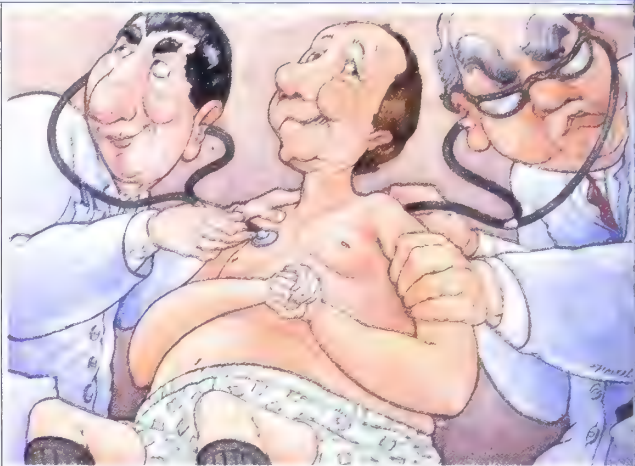
Since the October, 1987, crash, the system has become strained. In 1988, there were 6,101 cases in arbitration, up from 830 in 1980.

NO TIES. The new SEC rules, most of which go into effect Sept. 10, are meant to make the system more fair. The arbitration clause must now be in bold type; the arbitration panel's decision must be made public. And the panel, which is supposed to consist of "public" and "industry" arbitrators, must meet more stringent conflict-of-interest guidelines: Industry arbitrators include lawyers and accountants who spend more than 20% of their time working for the securities industry and their spouses and anyone who has retired from a securities organization. All arbitrators must disclose their business histories for the past 10 years.

In addition, the new rules now give the arbitrators more power to force brokers and customers to turn over relevant documents before the arbitration. The SEC has also doubled the dollar amount that can be disputed for small claims, to \$10,000.

SEC Chairman David Ruder strongly defends the new rules. "Markey claims I've sold out the public," Ruder has said. "And the brokerage industry is mad at me. So if the brokers are mad at me and Congress is mad at me, I think I made the right choice."

Laura Zinn



Health

SECOND OPINIONS: FIRST, TALK TO YOUR INSURER

Looking to reduce costs, many insurers now require a second opinion if a physician recommends surgery or expensive treatment. When you trust your doctor implicitly and want things over and done with, seeking a second opinion can seem a needless, time-wasting chore. But failure to get one means you risk paying a larger percentage of the medical bills yourself.

If friends or a local hospital can't suggest a physician to consult, call 800 638-6833. It's a federally funded hot line that lists medical organizations with rosters of second-opinion providers in every state (except New Jersey, which at present lacks a volunteer group to keep records). Or the insurer might give you a list of several consulting doctors in your area. The "patient advisory service" at Prudential Insurance goes so far as to schedule appointments with physicians who remain neutral by agreeing not to perform any of the surgery themselves.

'COVERED.' When a second opinion is required, the insurer pays for the examination. What if the second doctor disagrees with the first—suggesting, for example, physical therapy instead of surgery

for back pain? "If you decide to go ahead with the operation, you're covered under usual terms," says a J. Hancock spokesperson. "We just want to make sure you've been informed on all options." Not all plans, though, work that way. Some insurers require that the consultant confirm your doctor's original diagnosis.

When opinions differ, insurers typically will pay for a breaking exam by a third doctor if you choose, says Dan Dragalin, vice-president of Prudential's medical services. The odds of conflicting opinions vary with the procedure. With cataract surgery, for example, confirmation occurs about 86% of cases. The number falls to 80% for varicose vein surgery and 75% for hemorrhoid operations.

Recently, New York Insurance eliminated its second-opinion program after concluding that it was spending money needlessly for examinations that resulted in confirmation more than 80% of the time. But, says Dragalin, rather than drop their money-saving plan, Prudential opts to forgo second exams on specific procedures "such as a tonsillectomy where the confirmation runs 98%."

Don Dr...

Conflict-of-interest rules for arbitrators are now tougher

dispute through arbitration.

In a separate but related decision on May 15, the Supreme Court ruled 5-4 in *Rodriguez de Quijas vs. Shearson/American Express* that a predispute arbitration agreement is binding.

Representative Edward Markey (D-Mass.), chairman of the House subcommittee on telecommunications and finance, called the high court's decision "a blow to the small investor" and says he would like to see the arbitration clause eliminated altogether. "Investors should not be forced to make the Faustian bargain of signing away rights to litigate in order to invest in our financial markets," he maintains.

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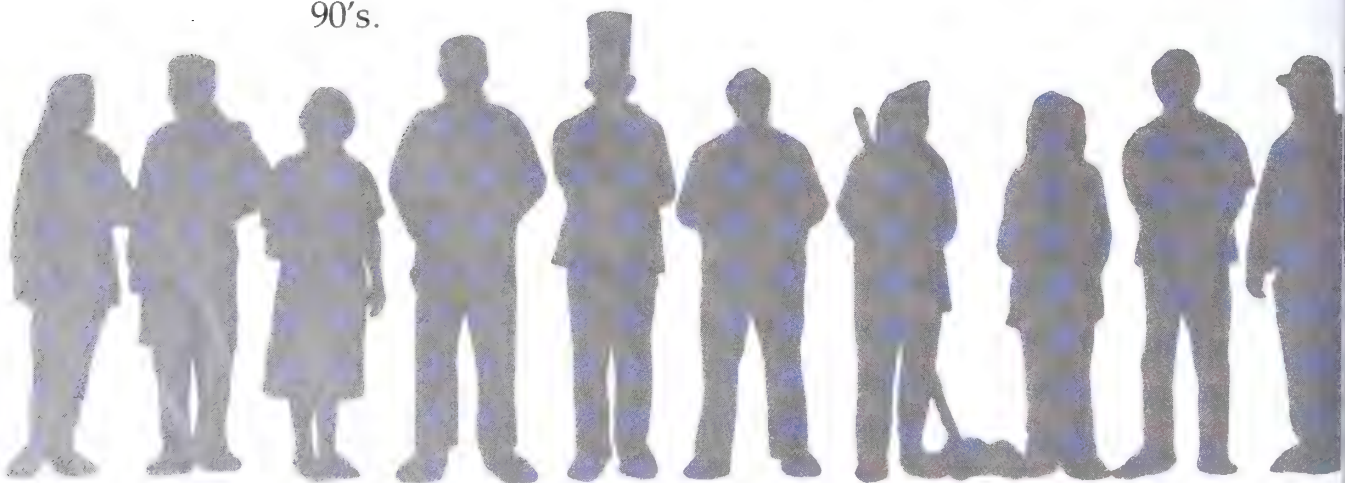
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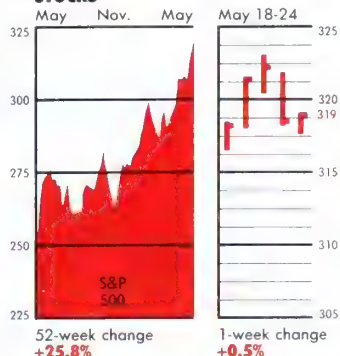
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Investment Figures of the Week

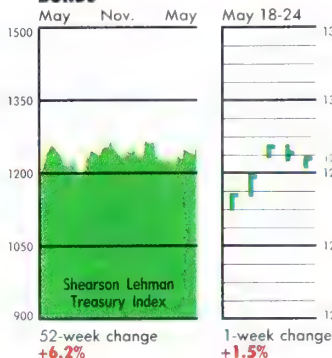
MONETARY

surged again this week, the Dow piercing 2500 and backing off as investors took. Yet the bigger news was foreign exchange markets, the dollar's newly found sent central bankers scurry-sperately to keep the back in check. Despite intervention, their efforts so even't worked. The rising old hurt companies with overseas operations. Indeed, ling in Merck was attribut- this factor.

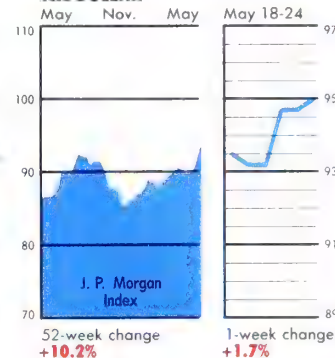
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MARKET ANALYSIS

STOCKS

	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	2483.9	0.9	26.6
COMPANIES (Russell 1000)	168.9	0.6	25.5
COMPANIES (Russell 2000)	169.5	0.7	21.2
COMPANIES (Russell 3000)	181.3	0.6	25.1

HIGH STOCKS

	Latest	% change (local currency) Week	% change (local currency) 52-week
DOW JONES (FINANCIAL TIMES 100)	2132.7	-1.1	19.2
DOW JONES (NIKKEI INDEX)	33,851.8	-0.4	23.4
DOW JONES (TSE COMPOSITE)	3667.4	-0.1	15.3

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.7%	8.5%	6.5%
30-YEAR TREASURY BOND YIELD	8.6%	8.8%	9.3%
S&P 500 DIVIDEND YIELD	3.4%	3.3%	3.8%
S&P 500 PRICE/EARNINGS RATIO	12.5	12.4	13.6

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	292.2	290.2	Positive
Stocks above 26-week moving average	68.5%	68.3%	Neutral
Speculative sentiment: Put/call ratio	0.22	0.22	Negative
Insider sentiment: Vickers sell/buy ratio	1.63	1.58	Positive

INDUSTRY GROUPS

4-WEEK LEADERS

	% change 4-week	% change 52-week
HOTELS AND MOTELS	18.5	46.4
REBUILDING	11.1	56.5
ENGINEERING AND CONSTRUCTION	10.2	36.2
BUILDING MATERIALS	9.4	2.3
SEMICONDUCTORS	9.2	0.1

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
COAL MINING	-6.1	-5.6
METAL AND GLASS CONTAINERS	-5.5	16.4
INSTRUMENTATION	-4.9	-5.4
WELL EQUIPMENT AND SERVICES	-4.2	2.0
MINING	-2.9	-20.1

Strongest stock in group

	% change 4-week	% change 52-week	Price
HILTON HOTELS	35.0	86.2	82 3/8
KAUFMAN & BROAD	20.0	46.2	14 1/4
FLUOR	11.3	53.9	27 1/8
OWENS CORNING	16.0	71.6	31 3/4
MOTOROLA	14.0	12.5	51 7/8

Weakest stock in group

	% change 4-week	% change 52-week	Price
HOMESTAKE	-9.6	-14.2	12 7/8
CROWN CORK & SEAL	-6.5	28.8	47
HEWLETT-PACKARD	-5.7	-6.3	53 3/4
BAKER HUGHES	-6.8	1.5	17
INTERCO	-27.3	-95.1	2

BRIDGE INFORMATION SYSTEMS INC

MUTUAL FUNDS

LEADERS

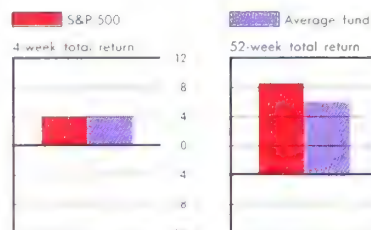
	4-week total return	%
BERMAN DEAN	11.8	
VENTIETH CENTURY GIFTTRUST INVESTORS	11.5	
INUS VENTURE	10.2	

LAGGARDS

	4-week total return	%
UNITED SERVICES GOLD SHARES	-12.2	
STRATEGIC INVESTMENTS	-11.5	
STRATEGIC SILVER	-7.6	

LAGGARDS

	52-week total return	%
STRATEGIC GOLD/MINERALS	-24.4	
STRATEGIC INVESTMENTS	-21.8	
SLH PRECIOUS METALS & MINERALS	-17.0	



MORNINGSTAR INC

RELATIVE PORTFOLIOS

amounts
sent the present
of \$10,000
ted one year
n each portfolio

antages indicate
ay total returns



U. S. stocks

\$12,893

+0.96%



Foreign stocks

\$11,804

-3.46%



Treasury bonds

\$11,783

+2.17%



Money market fund

\$10,678

+0.16%



Gold

\$8,013

-2.67%

DATA RESOURCES INC

to on this page are as of market close Wednesday, May 24, 1989, unless otherwise indicated.
y groups include S&P 500 companies only; performance and share prices are as of market close

May 23. Mutual fund returns are as of May 19. Relative portfolios are valued as of May 23. A more
detailed explanation of this page is available on request

AS CHINA'S PEOPLE POWER BLOSSOMS . . .

From time to time throughout its history, China has been swept by a new idea—from Buddhism to communism. And now it is happening again. The sight of millions of students, workers, intellectuals, and other Chinese trying to impose their will against the wishes of Premier Li Peng and his fellow hardliners seems to establish more firmly than ever that Western-inspired ideals of economic and political freedom are taking hold.

Obviously, it won't happen overnight. Zhao Ziyang, if reaffirmed as leader of the Communist Party, will be confronted with enormous difficulties. And it is unlikely that China will ever become a Western-style democracy, or that it will ever turn into a laissez-faire capitalist state. Whatever evolves will have a distinctly Chinese character, just as Indian Buddhism and *Mitteleuropaischer* communism took on Chinese complexions when they entered the country.

This fascinating moment in Chinese history has been at least a decade in the making. Deng Xiaoping launched his Open Door and Four Modernizations schemes in 1978 and 1979, respectively. They were an attempt to jump-start a woefully inefficient system that had been hermetically sealed off from the outside world. But certainly Deng never intended that the exposure would fundamentally change China's political structure.

The tens of thousands of Chinese students living in the U.S. and other Western nations undoubtedly have helped communicate a vision of the outside world. So, too, have

Western radio broadcasts from Voice of America and the BBC. Soviet leader Mikhail S. Gorbachev's view that some political and economic freedoms can be grafted onto a communist system also have had deep impact.

But perhaps most powerful has been the knowledge that the Chinese living in Hong Kong, Taiwan, and elsewhere in the world have achieved better living standards. When the Chinese living in Guangdong province see their Hong Kong cousins, and when the Chinese in Fujian province meet their Taiwanese relatives, they get a powerful message: China living in capitalist societies are considerably happier and richer.

Of course, even if Zhao and his reformers regain the upper hand, there are serious problems ahead: inflation, corruption, and shortages of power and raw materials, to name a few. A renewed dash for growth could also exacerbate the age-old divisions between coastal and inland regions, between cities and rural areas, and between Beijing and the provinces. That has the potential for provoking political backlash.

But it does seem that a New China is being created. Its character is characterized by a desire for both economic and political freedom. As the demonstrations attest, this desire has become an irresistible force. The old guard may stall or attempt to repress the New China. But it seems only a matter of time before Chairman Mao's movement undergoes a fundamental transformation.

. . . GORBACHEV'S REVOLUTION TAKES ROOT

Marxism sprang from a misguided revulsion against the marketplace and against the industrial revolution's seemingly unfair distribution of benefits between capital and labor. And when Marxism finally came to be applied, it happened in backward countries—Russia and China—in which tradition had produced states with the ability to inflict almost infinite suffering and deprivation on populations without losing power.

In 1917, Russia was a largely rural, feudal society woefully unindustrialized even by the standards of the time. So the whole of Soviet post-1917 history has been a forlorn economic catch-up operation conducted in a straitjacket in which the market was not allowed to work. And the deep strains that run through Russian history haven't helped. Dating back to the Duchy of Moscow, there has been a fear of encirclement that has produced deep patriotism but also a need to absorb neighboring countries or at least neutralize them as a buffer zone. And there is a long secret police tradition. So right from the start the Bolsheviks had an underperforming economy, an aggressive foreign policy, and an efficient apparatus for repression. With minor modifications it's been like that for more than 70 years.

Under Gorbachev, Moscow is trying to move away from these ancient fixations. This is a leader who understands that in today's world the Duchy of Moscow can't remain an island. Its old techniques for bridging the technological gap just can't match the speed of change. Even superb espionage is unable to keep pace with product cycles of bewildering speed and complexity. That, in turn, means that a disposable surplus for the military sector can't be maintained without eroding the already low standards of private consumption, limiting the Soviet capacity for aggressive foreign policy. Accordingly, Gorbachev is scrapping rigid central planning in favor of market forces. And he is making precedent-shattering initiatives for disarmament. Tragically, the Bush Administration is not showing the imagination that it needs to cope with this latest Russian revolution.

Sure, there are risks. But the West needs a program of disarmament that is at least as sweeping and bold as that proposed by Gorbachev. He has already shown willingness to reduce Warsaw Pact conventional forces even more than those of NATO. Washington must take the lead in pushing for a NATO consensus to bring that about. Otherwise, George Bush may well find himself on the wrong side of history.

June 12

► JACK KEMP'S CRUSADE ► OLIVETTI'S GAME

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BusinessWeek

JUNE 12, 1989

A MCGRAW-HILL PUBLICATION

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STALLED!

CAN DETROIT REV UP SALES?

The Big Three are trying to create new marketing strategies to reverse a slump

PAGE 78



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THE AMERICAN EXPRESS GOLD CARD



EVEN LOW-INTEREST FINANCING AND CASH REBATES AREN'T GIVING THE CRUCIAL SPRING CAR-SELLING SEASON MUCH OF A JUMP START

Cover Story

78 DETROIT TRIES TO REV UP

The Big Three may have improved design and quality, but when it comes to advertising and selling, the auto giants have been stuck in low gear. And as sales slow, that could mean trouble. To reverse the slump, carmakers are looking to ad agencies and consumer-product companies for inspiration and marketing managers. Will stronger marketing be enough?

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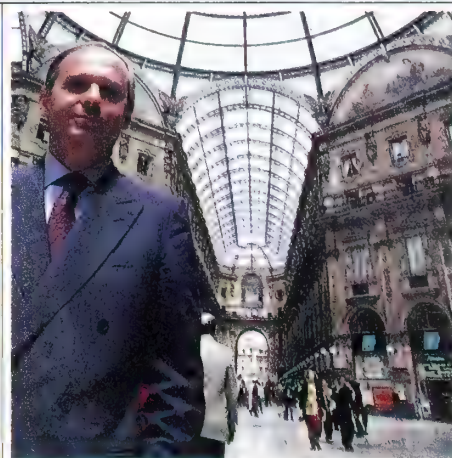
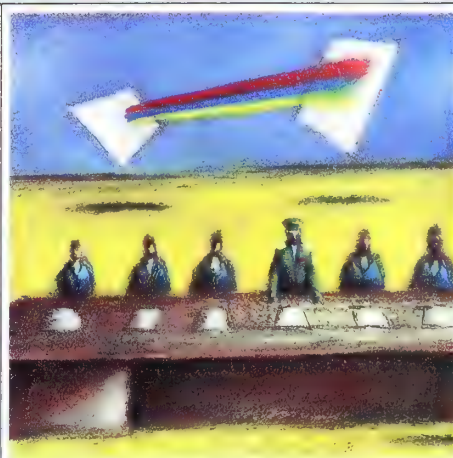
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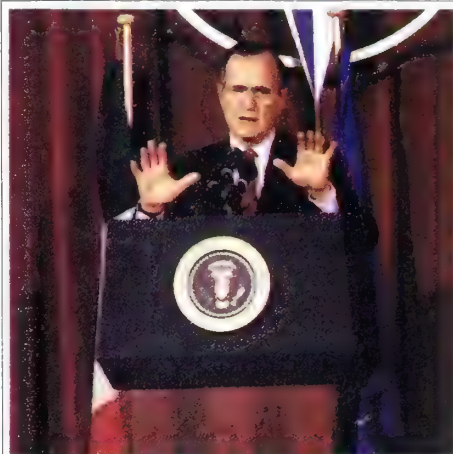
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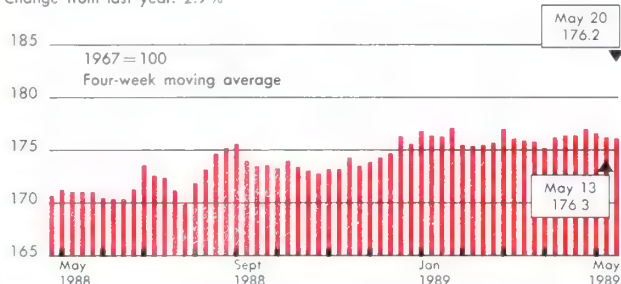
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BusinessWeek Index

PRODUCTION

Change from last week: -0.1%
Change from last year: 2.9%

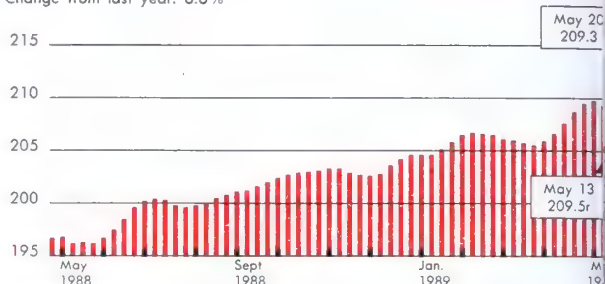


The production index was nearly unchanged for the week ended May 20. On a seasonally adjusted basis, output of paper, trucks, autos, coal, and electric power declined. Crude-oil refining, steel, and lumber production were up slightly. Rail-freight traffic and paperboard output were unchanged for the week. Prior to calculation of the four-week moving average, the index increased to 176 from 175 during the week before.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: -0.1%
Change from last year: 6.6%



The leading index fell slightly for the week ended May 20. For the latest week higher stock prices, lower bond yields, and faster growth rates for materials price real estate loans, and M2 indicated continued growth in the economy. These were partially offset by a sharp rise in the number of business failures. Before calculation of the four-week moving average, the index increased to 209.5 from 207.6 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/27) thous. of net tons	1,954	1,971 #	-3.2
AUTOS (5/27) units	147,404	159,479r #	-9.1
TRUCKS (5/27) units	85,832	89,073r #	2.4
ELECTRIC POWER (5/20) millions of kilowatt-hours	50,362	49,583 #	0.6
CRUDE-OIL REFINING (5/20) thous. of bbl./day	13,414	13,133 #	0.1
COAL (5/20) thous. of net tons	18,896 #	19,011	9.0
PAPERBOARD (5/20) thous. of tons	737.6 #	733.8r	1.1
PAPER (5/20) thous. of tons	712.0 #	744.0r	0.8
LUMBER (5/20) millions of ft.	484.0 #	476.1	-5.6
RAIL FREIGHT (5/20) billions of ton-miles	19.8 #	19.7	3.7

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/31)	1.43	1.43	1.26
GERMAN MARK (5/31)	1.99	2.01	1.72
BRITISH POUND (5/31)	1.57	1.57	1.81
FRENCH FRANC (5/31)	6.74	6.81	5.83
CANADIAN DOLLAR (5/31)	1.21	1.20	1.23
SWISS FRANC (5/31)	1.72	1.79	1.43
MEXICAN PESO (5/31) ³	2,472	2,465	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/31) \$/troy oz.	361.800	361.500	-20.8
STEEL SCRAP (5/30) #1 heavy, \$/ton	114.50	114.50	1.3
FOODSTUFFS (5/29) index, 1967 = 100	226.6	228.5	-2.9
COPPER (5/27) c/lb.	16.2	124.7	11.8
ALUMINUM (5/27) c/lb.	96.5	100.8	-20.2
WHEAT (5/27) #2 hard, \$/bu.	4.46	4.54	33.1
COTTON (5/27) strict low middling 1-1/16 in., g/lb.	62.47	62.79	0.9

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/26) S&P 500	320.04	317.63	2.4
CORPORATE BOND YIELD, Aaa (5/26)	9.41 %	9.54 %	-0.1
INDUSTRIAL MATERIALS PRICES (5/26)	104.4	106.2	4.4
BUSINESS FAILURES (5/19)	254	231	8.6
REAL ESTATE LOANS (5/17) billions	\$323.3	\$322.2	7.7
MONEY SUPPLY, M2 (5/15) billions	\$3,075.6	\$3,071.7r	0.8
INITIAL CLAIMS, UNEMPLOYMENT (5/13) thous.	326	310	9.0

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980 = 100), D.B. Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
12 LEADING INDICATORS COMPOSITE (Apr.) index	145.7	144.6	0.8
NEW HOME SALES (Apr.) annual rate, thous.	620	559	4.4
PERSONAL INCOME (Apr.) annual rate, billions	\$4,369.3	\$4,351.6	2.2
CONSUMER SPENDING (Apr.) billions	\$3,424.4	\$3,388.5	3.3

Sources: Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/15)	\$773.1	\$773.0r	1.7
BANKS' BUSINESS LOANS (5/17)	316.9	316.8r	0.6
FREE RESERVES (5/17)	350r	688r	-1.2
NONFINANCIAL COMMERCIAL PAPER (5/17)	123.1	122.8	7.7

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed on a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (5/30)	9.77 %	9.73 %	7.4
PRIME (5/31)	11.50	11.50	9.0
COMMERCIAL PAPER 3-MONTH (5/30)	9.31	9.21	7.4
CERTIFICATES OF DEPOSIT 3-MONTH (5/31)	9.55	9.50	7.4
EURODOLLAR 3-MONTH (5/24)	9.46	9.56	7.4

Sources: Federal Reserve Board, First Boston

The end of the error message.

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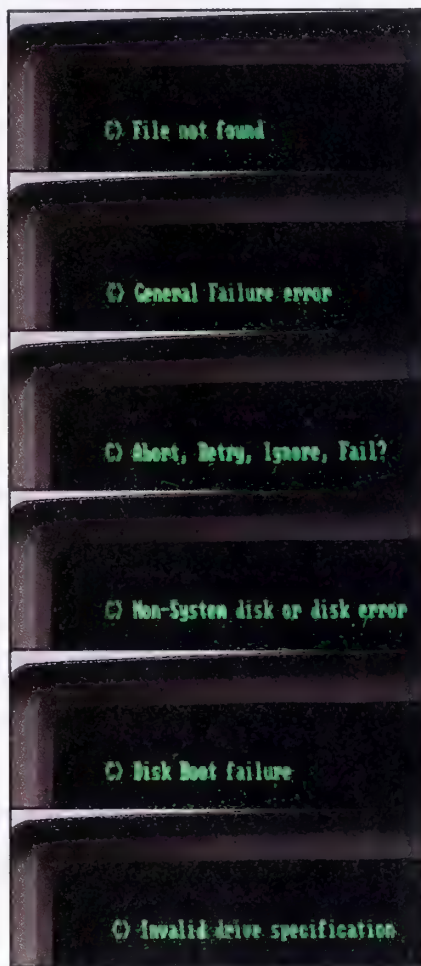
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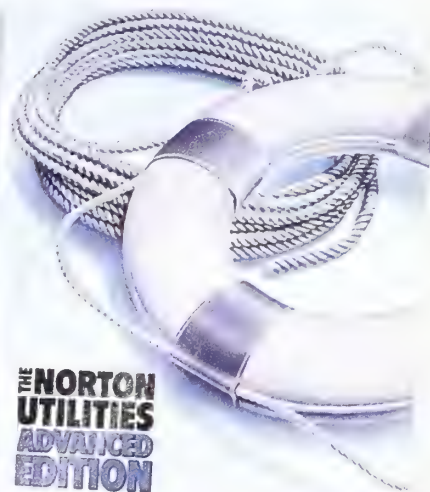
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Peter Norton
COMPUTING

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Her mother is an alcoholic.

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As she grows up, if she conforms to the usual pattern, here's what will happen:

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She'll also feel very scared.

Later, in her teens, she'll probably start drinking herself.

The evidence suggests that children of alcoholics are four times more likely than other kids to become alcoholics themselves.

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But we do know ways to reduce the suffering of children like Melissa.

We have educational programs and we promote research.

We can also put sufferers in touch with programs offering guidance to children and parents.

We're trying to break the cycle, but we can't do it alone.

If you'd like to help, send just \$10, or more if you can afford it.

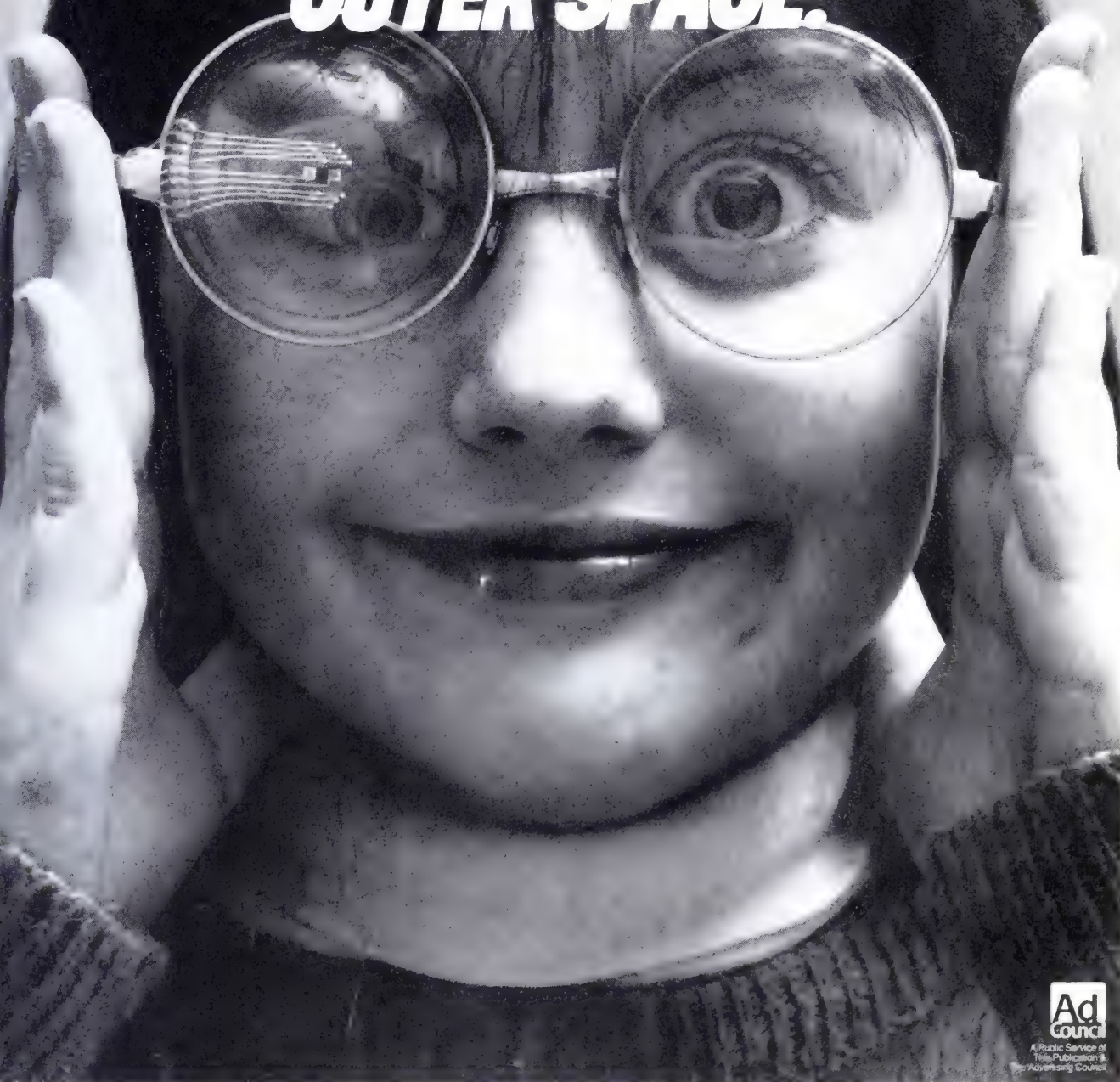
In return, we'll send you reports and information about this complex and alarmingly widespread problem.

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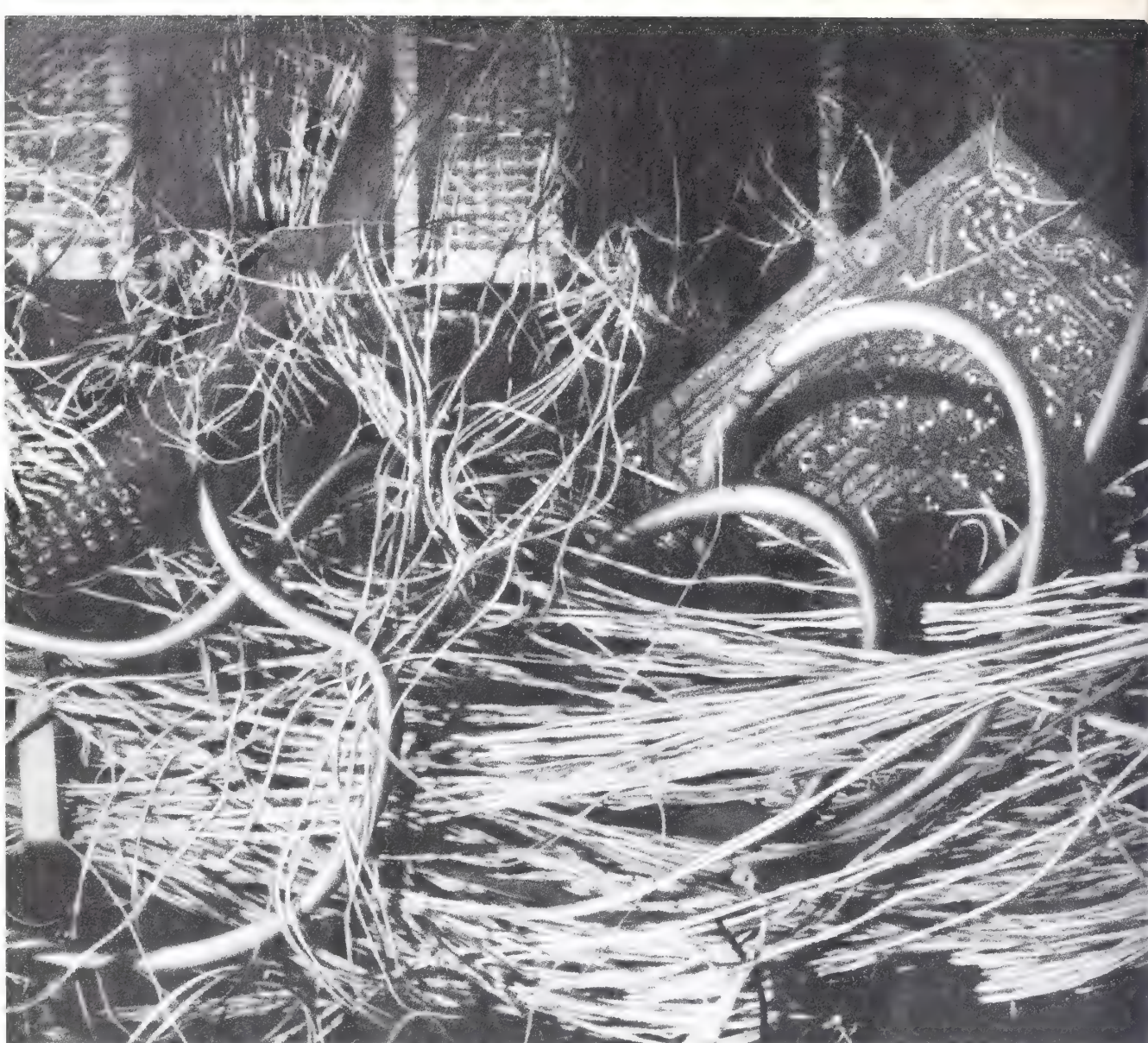
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WHY INFLATION WHIPS THE STOCK MARKET

The fact that common stock prices don't keep pace with inflation may be explained more simply than by the theories of David P. Ely and Kenneth J. Robinson ("Why stocks get weaker as inflation gets stronger," Economic Trends, Apr. 24). The answer: income.

Every pension or endowment-fund trustee, money manager, or homeowner knows that you can't pay a beneficiary, a college professor, or a mortgage banker with unrealized capital gains. You need cash to pay rising costs. In the inflationary periods of recent years, dividends have failed to meet this need, and no conservative money manager would propose a kamikaze strategy based on short-term trading of stocks to achieve higher regular cash returns.

To replace stocks, our capital markets have invented highly liquid, short-term, interest-bearing paper that does approach the goal of tracking inflation. Such instruments succeed for mostly structural reasons: deductibility of interest to the issuer, short maturities, rapid rollover, and efficient trading markets that continuously reset interest yields.

In the inflation of the unlamented 1970s, dividend yields would have had to reach 10% to 20% to beat cash returns. Historically, such yields on investment-grade stocks are almost unknown. And the nondeductibility of dividends, their double taxation, and the high cost of issuing equity assure that such yields will be unknown in the future.

All this suggests an answer to the question, why do some money managers take chances on junk bonds? Because they are under pressure to produce high cash returns. In inflationary times, one hears one's client saying: "Take the cash and let the capital gains go!"

Alexander S. Gardner
President

Alexander Gardner & Co.
New Canaan, Conn.

The answer to the question "Why can't the market tolerate high inflation?" seems to be the same as to why the "rule of 21" still works. The rule

states that when the price-earnings of the Dow Jones industrials plus the rate of inflation total 20 or more, the market is vulnerable. Prior to the October crash, the rate of inflation was 5%; the p-e of the Dow, 18.4%. Bingo.

During inflationary periods, so much of corporate earnings are a result of inventory profits (which are illusory and nonrecurring) that the market p-e must be adjusted downward to reflect this.

Thus, in periods of low inflation with truer earnings, the market p-e rises, resulting in higher stock prices. Real earnings encourage increased dividends that provide a higher real rate of return than during periods of rising inflation.

R. C. DeMont
Vice-President

Richardson Greenshields of Canada Ltd.
Halifax, Nova Scotia

ASIAN WAGES ARE STILL PLENTY CHEAP

Are you kidding? Your headline asks the question, "Is the era of cheap Asian labor over?" (International Business, May 15), and you point out that wages in the most prominent Asian Tigers have gone up to \$2 to \$3 per hour on the average. This compares with \$8 to \$10 in the U.S. and Europe. But in the early spring, I visited Bombay, Bangkok, and Manila—cities in countries with plenty of people seeking jobs. There the wage is closer to 50¢ per hour.

I remember when Taiwan was at 16¢ and Singapore at 32¢ per hour, in 1971. Mexico was 50¢ then. Today it is \$1.25 at the border—a not-overlooked bargain for serving the U.S. market.

Richard L. Bolin
Director
Flagstaff Institute
Flagstaff, Ariz.

ENTREPRENEURS DEPEND ON THE LITTLE GUY FOR SEED MONEY

James Poterba of Massachusetts Institute of Technology is right when he says that individual investors would be the primary beneficiaries of a cut in the capital-gains tax ("Don't expect any capital-gains tax cut to nourish startups," Economic Trends, Apr. 24). But he is

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Readers Report

wrong when he claims that individuals furnish only a small portion of America's risk capital.

In fact, individual investors account for the lion's share of risk capital in this country, according to a study by the Small Business Administration. They provide the crucial seed money for start-up companies. Since these individuals pay taxes on their investments, they are naturally sensitive to changes in the tax code, and under the current policy governing capital gains, they are given incentives to shift their money out of long-term, productive investment and into short-term speculation. Their motive in doing this is to maximize their return while minimizing their risk.

Society loses when we channel funds away from productive investment. America's future international competitiveness is threatened when we fail to invest in entrepreneurs today.

Frank Caufield
President
National Venture Capital Assn.
Arlington, Va.

SUGAR: THE U.S. IS ONLY PROTECTING ITSELF

The commentary on the U.S. sugar program ("U.S. consumers, and the Caribbean, are getting a sour deal on sugar," Top of the News, May 8) makes the unfortunate error of explaining sugar policy as if it were strictly a U.S.-Caribbean issue.

In fact, the real problem is not that U.S. sugar prices are artificially high, but that world sugar prices are artificially low—the result of a worldwide pattern of abusive subsidies. For example, in little over a decade, the European Community's sugar regime has turned the EC from a major net sugar importer to the world's largest exporter. In the process, world sugar prices have been depressed far below any country's cost of production.

The U.S. market is important to Caribbean producers because here they can get a reasonable price for their sugar. It would do their economies little good to export more sugar if all they can get is the depressed world "dump price." Yet that is what they would face if the U.S. canceled its sugar program unilaterally. Economic studies have shown that the major beneficiaries of such a change would be the EC and Cuba, not Caribbean Basin Initiative nations.

The real solution is to negotiate worldwide reforms at the multilateral trade talks. With this in mind, Agriculture Secretary Clayton K. Yeutter, no friend to protectionism, says the U.S. should not unilaterally change its program because

CORRECTIONS & CLARIFICATIONS

In the BUSINESS WEEK Top 1000 special issue, American Petrofina Inc. should have appeared on the list of 1988's top 200 mergers and acquisitions. If its purchase of some of Tenneco Inc.'s exploration and production operations for \$600 million had been taken into account, Petrofina would have ranked about 85th.

The cartoon positioned at the bottom of the page of In Business This Week (May 1) should have been credited to Gary Huck.

that would remove the incentive for groups such as the EC to reform.

Corn refiners are more than ready to compete on economic terms with sugar producers in any country. But like the CBI nations, we can't compete with government-subsidized export dumping. That's why we need the U.S. sugar program until we can get real reform.

Robert C. Liebenow, President
Corn Refiners Assn.
Washington

WHAT MADE THE THRIFTS GO BELLY-UP

The editorial "Are the thrifts getting another easy ride?" (Editorials, Apr. 24) stated: "A major reason that the S&L crisis spun out of control is that many thrift owners had virtually no equity invested in their institutions." Most of the institutions where there was fraud and self-dealing were stock companies in which the owners had money invested. There's another part of the industry called mutual savings and loans that are owned by the depositors. I think you will find most of these institutions solvent.

The six or maybe even seven thrifts in Texas that were guilty of impropriety and self-dealing, and even possibly fraud, did not cause the collapse of the thrift industry in the Southwest. It was the economy and a real estate collapse.

Marvin G. Kelfer
President and Chairman
Travis Savings
San Antonio

DOES STEEL REALLY NEED ITS SHIELD?

Robert Kuttner proves the obvious in his essay on the steel Voluntary Restraint Agreement ("Why scrap a steel policy that works?" Economic Viewpoint, May 22). Nothing in anything I have read by Adam Smith denies that an industry that is protected by any of a

variety of restraints of trade will make more money than one that is not. Mercantilists such as Kuttner have contended for centuries that industries should be protected for the national good. In the early 1800s, we heard about "infant industries." Now, it's senescent industries such as steel that need protection.

The question I ask Kuttner is this: How much more for steel have we paid as a result of the government's advised steel-industry welfare program? That is the question the supposedly adolescent Adam Smith would have asked. Kuttner ignored it completely.

Sherwood G. Briggs
New Orleans

Regarding Robert Kuttner's column, keep in mind that domestic steel customers will always buy cheaper foreign steel given the opportunity to leave the American steel industry hanging in limbo until it's too late.

James J. Taggart
Vice-President
Prochemco Inc.
East Gary, Ind.

WHY IT WOULD MAKE SENSE TO HAVE ONLY ONE LABOR LAW

I must agree with your editorial that there are, at least, two labor laws in many ("Two labor laws are one too many," Editorials, Mar. 20). Having practiced labor law for many years with the general counsel's office of the National Labor Relations Board (NLRB) and as a representative of management in the private sector, I can confirm your conclusion that the Railway Labor Act is no longer productive is sadly correct. With all of its faults, the National Labor Relations Act, which governs employees', employers', and unions' rights in the "rest" of the private sector, is an example of legislative brilliance. More important, the NLRB's personnel have a record of effective administration in a difficult arena of competing interests.

The RLA, besides being an arcane and unrealistic statute, is administered through at least two different federal agencies. In an era where corporations and individuals are expected to tighten up their operations, to bring the less remaining portion of the economy under the NLRB's umbrella would make a great deal of economic and practical sense.

Frank T. Mart
Detroit

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THE MANAGERIAL MYSTIQUE: RESTORING LEADERSHIP IN BUSINESS

By Abraham Zaleznik
Harper & Row • 307pp • \$22.95

SO MANY MANAGERS, SO FEW LEADERS

"Some people can manage and some people can't manage. I figure I can manage."

—Ernest Bradshaw, audit supervisor
From Studs Terkel's *Working*

Sure, but can he lead? Can anyone? If the volume and tone of today's literature on the subject are any indication, Americans are fascinated by those at the helm of business—and disillusioned with them, too.

Harvard business school professor Abraham Zaleznik certainly is. True leadership, he argues, is made of "substance, humanity, and morality. We are painfully short of all three qualities in our collective lives." Our corporations, he says, are governed by caretakers—executives who substitute mediocrity and manipulation for substance and

vision. The managers have seized control and left leadership behind.

The Managerial Mystique is a grim treatise on the degeneration of leadership in Corporate America and the resulting decline of U.S. business itself. Modern executives, the author asserts, have twisted Frederick Taylor's theories of scientific management, organizing operations without improving them. They control their employees with psychological pressure instead of motivating them with good examples. Individuals are subsumed to the organization, and lines of communication are down. Goal-setting has become a mechanical exercise: Instead of thinking innovatively, managers fall back on what has succeeded in the past, afraid to deviate from what they know customers like.

Zaleznik picks former ITT Chief Execu-

tive Officer Harold Geneen as an object lesson in how not to run a company. He argues that Geneen's passion for process over substance reflected "the arrogant confidence in the mystique that has overpowered the mentality of corporate chief executives." It also, he says, forced Geneen's eventual downfall. His lust for control, for instance, led him to acquire dozens of unrelated businesses that soon turned sour.

Most American business schools reinforce the managerial mystique. They give students a technical education and a sense of great self-importance but fail to instill useful and lasting values. Once in the corporate ranks, the graduates develop tunnel vision as they struggle with Wall Street's penchant for short-term profitability and with takeover artists who see no further than the bottom line. This environment, Zaleznik writes, has "nailed the coffin shut on business as an institution." What remains are organizations devoid of identity, corrupted by politics, and unequipped to compete in a global economy.

That is exactly what executives everywhere need to hear. It's profoundly relevant at a time when those we consider true leaders—Zaleznik mentions Steven



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bs, Sam Walton, and Mary
ay Ash—are the exception
her than the rule. But it's not
rticularly new. Zaleznik made
e same complaints in an impor-
t 1977 *Harvard Business Re-*
ew article, *Managers and*
aders: Are They Different?
though the arguments in *The*
anagerial Mystique have
own more mature, passionate,
d compelling, it's a bit disap-
inting to find that 12 years af-
t first expounding his thesis,
leznik hasn't come up with
ch new material.

Eventually, we get the mes-
ge and ask: "So what?" After
dissection of managerial me-
erity, Zaleznik doesn't offer
any substantial recommenda-
ns. He writes of the need for
agination and charisma. He
serves that managers must be
lling to force change on their
ganizations. He insists that
self-esteem follows not from
bmerging oneself in the team and
lowing process, but from facing up
problems, assuming responsibility,
d doing good work." But that conclu-
on could wrap up any number of self-
lp books, and it doesn't really address



the problem of puffed-up executive egos.

Zaleznik would also have our MBA pro-
grams teach leadership. He regards to-
day's top business schools as manage-
ment factories, where bright, jaded
college graduates pick up enough ana-

lytical skills to become bright,
jaded investment bankers.
There's a lot of truth to that.
But the notion that business
schools can train people to be
leaders is as iffy as the idea that
they can teach people to be ethi-
cal, as some are now trying to
do. Ever since Plato, the ques-
tion of whether qualities such as
creativity and morality can be
learned in the classroom has
been a matter of debate.

The leadership dilemma defies
easy answers because, as Zale-
znik observes, it's a product of
decades of social programming.
Today's executives are in love
with their mystique and unlikely
to give it up. So the creation of a
new class of leaders requires a
revolution in American business.
Perhaps such change can come
only from entrepreneurial start-
ups. Perhaps it must be forced
upon us by foreign owners or
competitors. One thing is cer-

tain: Like any bad habit, the managerial
mystique will be tough to kick.

BY KEITH H. HAMMONDS

*Hammonds is a correspondent in BW's
Boston bureau and a 1986 graduate of Har-
vard business school.*



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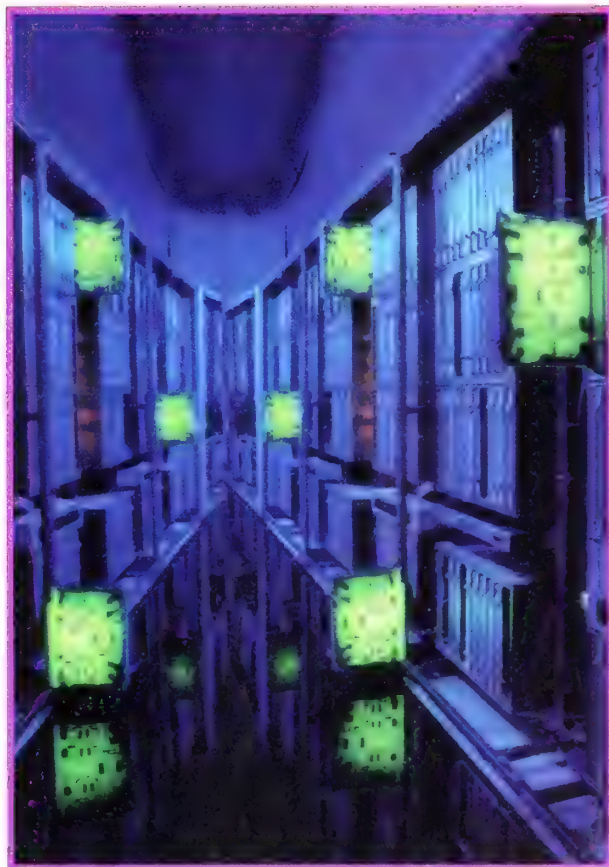
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DON'T LAUGH: THIS PLAN FOR REGULATING AT&T ACTUALLY SOUNDS GOOD

BY ALAN S. BLINDER



Using price caps for long-distance service should ease bureaucratic gridlock, spark innovation, and ultimately cut costs. If the scheme flops, some economists will have egg on their faces

Hold the phone. The Federal Communications Commission is about to change the way it regulates long-distance telephone service, again. Last time, the pressure for change came from a court case. This time, economic arguments put forth by my colleagues William J. Baumol and Robert D. Willig proved persuasive to both American Telephone & Telegraph Co. and the FCC. The new regulatory system is designed to mimic the results of a competitive marketplace. If it works, consumers will enjoy better service at lower prices, and AT&T—the only regulated long-distance company—will be freer to make decisions. If the scheme fails, some economists will have egg on their faces.

Until now, the FCC has regulated AT&T by limiting the profit it is permitted to earn. The idea is to hold AT&T's profit to the "fair" rate of return on capital, thus preventing the industry giant from exercising its market power. When you think about it, however, rate-of-return regulation is a remarkably circuitous route to what really matters to consumers: lower prices for phone services. After all, if a single company can grow rich while charging prices below what a competitive industry would charge, why should consumers care?

An ideal, highly competitive telephone industry would best serve the public interest by charging the lowest prices that could be maintained in the long run. But the technology of telecommunications gives cost advantages to big companies, making this ideal unattainable. Price caps are meant to produce the substance of competition (low prices) without the form (numerous companies) by limiting what giants such as AT&T can charge.

WHY CHANGE? When the new system goes into effect on July 1, price caps will be set just below current rates. Thereafter, the FCC plans to allow annual price increases but limit them to 3% less than the rate of inflation. The rationale for this rule is that telecommunications costs have historically grown more slowly than economywide inflation, thanks to rapid technological progress. Letting the price caps rise by less than inflation makes the industry pass productivity gains along to consumers.

Those who suffered through the breakup of the Bell System are probably now thinking: Oh no, not again! If the regulatory system isn't broke, why fix it? The answer is that the old system of rate-of-return regulation, if not broken, is at least rusty. The new, price-cap system is designed to repair its defects.

First, rate-of-return regulation is bureaucratically cumbersome and unduly adversarial. Regulatory proceedings can take months, absorb thousands of expen-

sive labor hours, and require Solomon-like judgments on the fair rate of return. Under price caps, interferences with business decisions should be minimized, simplifying life for the FCC and AT&T.

Second, the current system requires more information than economists, accountants, and engineers can provide. To assess the profits AT&T derives from regulated lines of business, the FCC must know the costs of providing those services. But not even the company knows that. For example, how much of the cost of running AT&T's central administrative offices is properly allocable to long-distance transmission? Since such questions are unanswerable, regulators fall back on arbitrary accounting procedures that are correct only by sheer luck. To enforce price-cap regulation, regulators need know no more than what prices are being charged.

REAPING REWARDS. Third, and probably most important, the old form of regulation leaves little incentive for technological and product innovation. Under rate-of-return regulation, a company that raises its productivity or invents a new product soon finds its profits rising as regulators clamor for price cuts that will reduce profits to normal. Under price-cap regulation, the company can reap the rewards of its innovations, at least for a while, because new products will not have price caps at first. The new system should therefore stimulate innovation. The FCC embodies this hope in new regulations by assuming a future 3% annual productivity gain even though AT&T's historic rate has been just 2%. The company must innovate faster—or see its rate of profit decline.

Are there dangers in the new system? Of course. No regulatory mechanism is perfect. The main worry is that price caps will be set at inappropriate levels. If they are set too high, consumers will be deprived of the main benefit the new system promises to deliver: cheaper long-distance services. If prices are set too low, AT&T will suffer from low profitability. But in the long run, consumers will suffer when carriers withdraw from unprofitable lines of business.

There is no way to avoid this danger entirely, but the FCC has taken two important steps to minimize it. It will place caps only on specially constructed price indexes covering broad classes of products—all residential services, for instance—not on the prices of specific products such as daytime calls from Fort Rilea to Dubuque. And the entire system will be reviewed in three years to see if it is living up to expectations.

Will it all work out according to plan? You'll see the answer soon in your long-distance bills.

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Gripper	\$20,000	\$17,000	\$15,500	\$10,000
Extra Spring	\$35,000	\$38,000	\$33,000	\$39,000
Torque-master	\$10,000	\$28,000	\$34,000	\$37,000
Total	\$65,000	\$83,000	\$82,500	\$136,000

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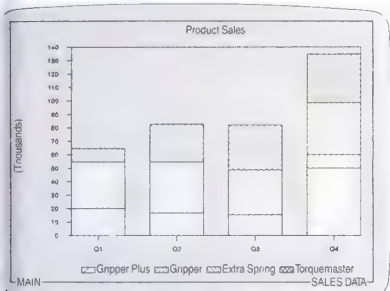
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Palovien	Northeast	13	45	26
O'Malley	South	13	45	26
Levin	Central	24	45	17
Rollins	South	12	13	45
Waring	Southwest	78	15	63
Plavin	Southwest	66	78	23
Rahodith	Central	67	45	32
O'Brien	Northwest	25	64	89
Vireen	Southwest	56	38	21
Timmons	Northwest	54	87	89
Graham	Southeast	45	68	94
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BY GENE KORETZ

APRIL WAS A SWEET MONTH FOR STATE TAX COLLECTORS

The federal government isn't alone in benefiting from an unexpected surge in personal income-tax revenues during the April taxpaying season (BW—May 29). Gerald H. Miller, executive director of the National Association of State Budget Officers, reports that an informal survey of two dozen states around the nation indicates that "almost all of them have gotten more income-tax revenues than they expected."

So far, California seems to have reaped the largest windfall, with income-tax revenues running some \$1.2 billion over projections. New York state officials say the tax take from individuals is exceeding expectations by \$150 million to \$200 million. New York City counts an additional \$110 million, while Ohio reports that personal-tax revenues so far are outstripping recently upward-revised projections by \$40 million.

The downside is that many states, particularly in the Northeast, also complain of lagging sales-tax revenues. A New York City official calls them "terrible," while Connecticut legislators cite them as the reason why the state, which doesn't impose an income tax, is being forced to raise taxes.

Budget officers in New York and Illinois report that much of the added revenues represent estimated payments from higher-income taxpayers seeking extensions. That suggests that several factors may have contributed to the payment surge, including a pickup in capital gains—some from mergers and LBOs—the phasing out of tax shelters, and the deferral of income to 1988 because of lower tax rates. Whatever the cause, the combination of high income-tax revenues and low sales-tax receipts confirms the view that consumers are saving more and spending less, even though income growth has been strong.

MORE FACTORY WORKERS—BUT FEWER WITH UNION CARDS

The gains posted by factory employment last year didn't arrest the decline of organized labor in the manufacturing sector, reports Grant Thornton, the accounting and management consulting firm. According to the firm's annual *Manufacturing Climates Study*, manu-

facturing jobs rose by more than 335,000 in 1988, while union membership fell by 113,000. Only 24.9% of last year's 19.3 million manufacturing jobs were filled by union members, whose ranks in the industry have plunged by more than 2 million since 1980, says Grant Thornton.

THE ACQUISITION BOOM HAS LOST A LOT OF ITS THUNDER . . .

Corporate mergers and acquisitions have been a major spur to stock market gains—not only by extinguishing some \$444 billion in equity through stock buybacks since 1983, but also by raising the prospect of a seemingly endless supply of new deals on the horizon. Nonetheless, there are signs that the pace of acquisition activity is slowing. According to IDD Information Services, the number of announced leveraged buyouts in the first quarter was 57% less than year earlier, while their dollar value plummeted 83%, to just \$4.14 billion.

This subdued pace is partly a reaction to the \$25 billion RJR/Nabisco Inc. LBO, which is still being digested by the financial markets. And higher interest rates have also exacted a toll. But economist Robert A. Schwartz of Merrill Lynch Capital Markets believes that fundamental valuation trends point to a continuing slowdown in acquisition activity.

RIISING STOCK PRICES MAKE BUYOUTS LESS OF A BARGAIN



*REPLACEMENT COST OF PHYSICAL ASSETS PLUS FINANCIAL ASSETS OF NONFINANCIAL CORPORATIONS LESS LIABILITIES

DATA: FEDERAL RESERVE BOARD, MERRILL LYNCH CAPITAL MARKETS

Specifically, Schwartz notes that the gap between the market value of equity and the replacement costs of corporate assets is shrinking rapidly. When the acquisition boom took off in the early 1980s, the stock market valuation of equities came to about 40% of corporate net worth, some three-fourths of which

is made up of physical assets. But by last December, rising stock prices pushed it to 69% of replacement cost, and Schwartz estimates it reached 77% by the end of last quarter (chart). "making potential takeover candidates less and less of a bargain."

To be sure, by Schwartz's calculations the stock market is still undervaluing corporate assets by about 25%. But he notes that acquisitions and buyouts in recent years have usually been made at a premium of 20% to 25% to market value. "In that sense," he says, "corporate assets are now fully priced."

Similar caveats apply to the cash-flow projections on which many deals are predicated. Schwartz points out that a slowing economy, combined with the already highly leveraged position of the corporate sector, makes such cash-flow calculations chancier than ever. Indeed, he estimates that net interest payments of nonfinancial corporations absorbed some 27.6% of cash flow in the first quarter. That's up from 18.5% less than four years ago and higher than the previous record of 27.4% set in the midst of the 1973-75 recession.

... BUT TAKEOVER CANDIDATES STILL THRILL WALL STREET

Takeover activity may be cooling, but takeover fever is still rampant on Wall Street. Economic consultant A. Gary Shilling calculates that in April an average of four of the 15 most active stocks on the New York Stock Exchange were takeover candidates or in takeover heavy industries. That represents twice the number and twice the trading volume of such stocks among the 15 most active in both April, 1988, and April 1987. "If you eliminate the stocks like AT&T, Exxon, and General Motors, which normally appear on the most-active list because they have huge numbers of outstanding shares, the takeover stocks are clearly dominant," says Shilling.

To Shilling, the situation recalls the early 1970s, when the stock market was also mesmerized by a favorite band of stocks: the "nifty fifty" growth stocks that enjoyed stratospheric price-earnings ratios. "The narrow focus of the market in those days was signaling something wrong with the basic economy," he says, pointing to the subsequent growth-stock debacle during the 1973-75 recession. Thus, despite the market's recent healthy gains, Shilling remains wary. "The nifty fifty may be history," he says, "but the terrific takeover targets are sounding the same warning bell."

ON SECOND GLANCE, THE FIRST QUARTER LOOKS EVEN BETTER

Hindsight clears up all kinds of things—especially economic data. The Commerce Dept.'s revision of last quarter's gross national product gives a different view of the economy from the one that emerged from the original report. And that new look bolsters hope that the "soft landing"—an end to inflation without recession—may come true.

Commerce lowered its measure of growth in first-quarter real GNP to an annual rate of 4.3% from 5.5%, an unusually large revision. Excluding the post-drought rebound in farm output, which added 2.5 percentage points, growth in the rest of the economy slipped sharply from the 3% originally reported to only 1.8%, the slowest pace since the fourth quarter of 1986.

The revision puts economic growth more in line with the cooler pace that the Federal Reserve Board and the financial markets want to see. Ignoring the effects of the drought, the economy in 1988 grew by 3% to 3.5% in each quarter—too fast to keep inflation in check.

EXPORTS ARE STILL ROBUST

But the new, slower pace doesn't mean that the expansion is in danger of petering out. Indeed, the government's index of leading indicators, designed to foreshadow the economy's path, rose a strong 0.8% in April, reversing the declines posted in February and March. More important, the mix of first-quarter GNP has positive implications for the rest of the year.

Export growth last quarter turned out to be a lot stronger. Exports skyrocketed in March, but Commerce had trade data only for January and February when it compiled its original report. Strong foreign demand should keep plenty of steam in manufacturing.

Stronger exports, along with a downward revision to imports, shrank the real trade deficit, adjusted for prices, to the lowest level in four years. Further gains in narrowing the trade gap may be on the way. Customs duty payments in April fell a sharp 14.5%, a good sign that imports fell.

Inventories contributed most of the downward revision in first-quarter GNP. Nonfarm stockpiles, adjusted for inflation, grew by only \$29.1 billion last quarter—far below the originally reported growth of \$41.1 billion (chart). The biggest revisions occurred in wholesale trade, particularly in big export items such as metals, machinery,

and lumber. The March resurgence of exports probably caught some exporters by surprise, and they had to draw down stocks to meet demand.

The numbers imply that inventories are lean, except in the auto industry, where sales remain disappointing even in the face of widespread incentive programs (page 78). In general, however, excessive inventories won't impede continued growth in industrial output this summer.

As the second quarter began, stock levels in manufacturing rose only 0.6% in April, the same as in March, while April shipments jumped 2.4%. That dropped the ratio of inventories to shipments to 1.56 from 1.58 in March, a sign that factory inventories remain in good enough shape to keep production lines humming.

The mix of lean inventories and strong exports looks even better when combined with the quarter's slower pace of consumer spending. Moderation in consumer demand is a key in taking pressure off inflation, and it will help slow the growth of imports.

ARE HIGH PRICES CURBING SALES?

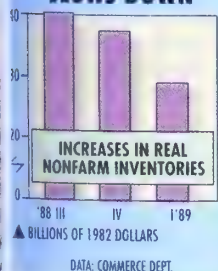
Consumer spending was still subdued as the second quarter began. Outlays jumped by 1.1% to an annual rate of \$3,424.5 billion, but higher prices accounted for most of that increase. After adjusting for inflation, real spending edged up a moderate 0.3%, continuing its sluggish pace of recent months (chart).

Consumers did buy cars in April. Inflation-adjusted sales of new cars soared 13.2% from March, thanks to generous financing deals. However, car purchases backpedaled in May. That new weakness and the 8% decline for the first four months, compared with last year, suggest that Detroit's incentive programs are wearing thin.

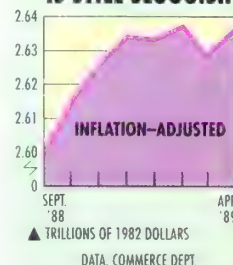
The jump in April car sales boosted real spending for durable goods by 2.8%, after three consecutive monthly declines. But excluding autos, durable-goods spending was up just 0.4%, held back by declines in furniture, electronics, and jewelry. Weakness there may reflect high interest rates and growing caution among consumers about their financial prospects.

Sales of nondurable goods have also been sluggish. That's a little harder to figure, since the weakness includes such staples as food and energy—purchases that are hard to postpone. Even so, price-adjusted spending on nondurable goods fell 0.9% in April, following a 0.7%

INVENTORY GROWTH SLOWS DOWN



CONSUMER SPENDING IS STILL SLUGGISH



Business Outlook

decline in March. And it rose by only 0.2% in February.

One explanation is that consumers are resisting higher prices. That could be the case in energy, where prices have shot up. Real purchases of gasoline dropped 0.6% in April, and heating-fuel usage fell 6%.

Some price resistance also shows up in services, where outlays rose 0.4%. Spending on air travel—where ticket prices have risen at a 6.2% annual rate so far this year—fell 1.7% in April, after a 4.4% plunge in March.

Consumers have probably balked most at the higher cost of owning a home. Sales of new single-family houses did bounce back in April, but that strength looks temporary. Home sales rose 10.9% to an annual rate of 620,000 in April. But March sales were revised sharply down to 559,000 from the previously reported 587,000.

The April rebound shows that home demand, while weak, is not in such bad shape as the sharp declines in February and March implied. Home sales jumped in January because of the month's mild weather, stealing some strength from the other winter months.

Lofty mortgage rates and rising prices continue to make homeownership unaffordable for many. That's the big reason new-home sales so far this year are running 4.7% below their 1988 pace—and why the housing sector will remain a drag on the economy in the second half.

A MILD CASE OF ECONOMIC JITTERS

April's small gain in real consumer spending means that inflation-adjusted outlays started the second quarter just 0.7% above their first-quarter average, at an annual rate. Jitters about the economy's future seem to be playing a big part in holding down spending at a time when personal income is growing. Consumer confidence in the economy has been trending down since mid-1988, and the latest readings show further erosion in May.

The University of Michigan's Survey Research Center reports that the index of consumer sentiment dropped 0.9% in May, its fourth consecutive decline. And consum-

ers are less optimistic about where the economy will be six months from now. The center's index of consumer expectations fell 3.7%, to 80.1 in May (chart), its lowest since just after the October, 1987, stock market crash.

Although weaker consumer spending has slowed imports and eased the squeeze on capacity in some industries, it's still possible that a severe slowing in consumer spending could drop the economy into a recession, even if foreign trade continues to improve. That's because consumer spending makes up some two-thirds of GNP.

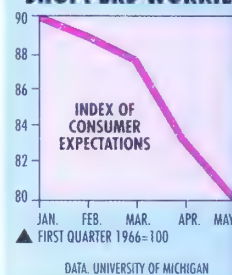
Indeed, merchandise exports—one of the expected leaders of economic growth this year—would have to increase at an annual rate of more than 32% to compensate for just a one-percentage-point slowdown in the growth of consumer outlays. That would mean a doubling of exports' strong 15.4% growth rate in the first quarter.

But consumer spending isn't likely to slow sharply. Healthy growth in jobs and income continues to bolster consumers. In April, personal income increased by 0.4%, to an annual rate of \$4,369 billion. Excluding falling farm subsidies, nonfarm income rose a robust 0.6%, as did wages and salaries.

Many individuals faced big tax bills in April, which could have held back major purchases. Aftertax income didn't grow at all in April, and inflation resulted in a 0.7% decline. Real aftertax income, however, is still healthy 5.5% above a year ago, and it soared at a 7.8% annual rate in the first quarter.

So, while growth in consumer spending is likely to remain soft, it should still be strong enough to keep the expansion chugging along. All in all, the mix of economic growth so far this year has been just the ticket that could bring the economy in for a soft landing.

THE FUTURE HAS SHOPPERS WORRIED



THE WEEK AHEAD

NAPM SURVEY

Monday, June 5

The index of business activity compiled by the National Association of Purchasing Management probably increased to 54.5% in May from its level of 53% in April. The NAPM surveys its members—mostly in manufacturing—on the current status of their companies' employment, inventories, prices, orders, and deliveries. The expected rise in May suggests that the factory sector is improving in the second quarter.

in the first 20 days of last month are already running at that pace, and little improvement is expected in the last 10-day period. The May selling rate would be a drop from April's 7.5 million pace, when financing deals were reintroduced.

INSTALLMENT CREDIT

Wednesday, June 7

Consumer debt probably grew by \$5.4 billion in April, the same as in March. That's suggested by increases in personal bank loans and auto financing.

CAPITAL SPENDING

Thursday, June 8, 8:30 a.m.

Companies probably haven't changed their 1989 capital spending plans by very much since the Commerce Dept.'s last

survey in November. Back then, the planned to raise real plant and equipment investment by 6.3%, compared with a 10.1% rise in 1988. The previous survey indicated that spending would be contracted in early 1989, with a decline projected for the second half. The latest survey will report plans for each quarter of 1989 and may show a smoother pattern of growth.

PRODUCER PRICE INDEX

Friday, June 9, 8:30 a.m.

Most economists expect that producer prices for finished goods increased 0.5% in May after rising 0.4% in April. Higher energy and new-car prices will lead the overall gain. So far this year, prices have risen at a 9% annual rate.

Domestic new cars likely sold at a 7.1 million rate in May. Sales



FUJITSU

National Team Championship Series

Everyone's a Winner in the World's Largest Amateur Golf Team Tournament

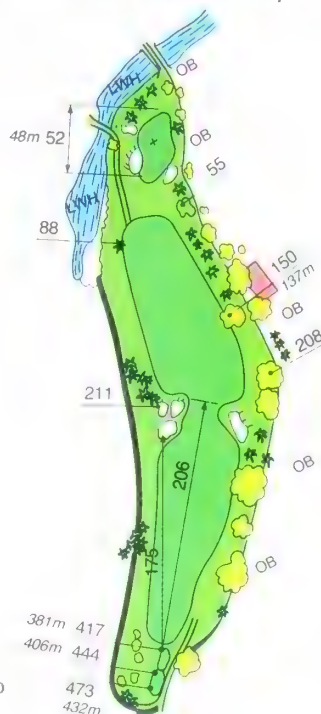
Qualify at your course from May 13 to July 8, 1989

The Amateur Event

- Two-person, better ball event (four-ball stroke play)
- Open to men, women, and mixed teams
- Maximum handicap (18 for men, 36 for women) will be used if actual handicap is higher. Other players will use certified handicap
- Entry fee is \$95 per team, which is a one-time fee
- Qualify at your course anytime from May 13 through July 8, 1989
- One of every four teams will advance to the District event
- 10% of District winners advance to Regional event; 10% of Regional event winners advance to Sectional event
- 72 teams advance to the Finals, held at Royal Kaanapali Golf Course in Maui, Hawaii, between November 27 and December 1

Prizes

- Non-qualifying teams at District, Regional, and Sectional events will receive \$3,000 in merchandise certificates, the total amount to be split among ten teams



- Each team member receives up to \$3,000 in Express Certificates, which can be used to purchase valuable merchandise and services at a discount, just for entering
- For application forms, contact your local club professional or see the display located in your golf shop

The Professional Event

- Pros play for cash at every site, with total purse of up to \$515,000, and purse at National Finals up to \$300,000
- Pros will be paid travel expenses to each site for which they qualify
- No entry fee

Tournament Schedule

Qualifying	May 13th — July 8th	At your course
District	Aug. 19th — Aug. 27th	At clubs in your district
Regional	Sept. 16th — Sept. 27th	At clubs in your region
Sectional	Oct. 14th — Oct. 28th	Sites to be determined
National Finals	Nov. 27th — Dec. 1st	Royal Kaanapali Golf Course in Maui, Hawaii

For more information about the Tournament, please contact Fujitsu National Team Championship Series: 1-800-777-NTCS

A global giant with annual sales of \$16 billion and nearly 100,000 employees worldwide, Fujitsu is a

world leader in computers, telecommunications, semiconductors and electronic components.



The global computer & communications company.

Fujitsu National Team Championship Series is sponsored by Fujitsu Limited in cooperation with Fujitsu TEN Limited and Teknika Electronics Corporation

THE NATO SUMMIT



AT THE NATO SUMMIT: A WARMER TONE TOWARD THE SOVIETS—AND A PLAN THAT CHANGES THE GROUND RULES OF NATO'S BARGAINING STAND

JUNE 12, 1991

BUSH PULLS ONE OUT OF A HAT

HIS STUNNING ARMS-CUT PROPOSAL SUDDENLY PROJECTS HIM AS A LEADER

It was a public relations coup even Mikhail S. Gorbachev would envy. George Bush, at his first NATO summit as President, offered a bold proposal to cut U.S. troops and allied armaments in Europe. Faster than you can say "perestroika," the image of Bush as unimaginative and unnecessarily cautious in foreign policy has been replaced by Bush, the leader of the West. By healing deep divisions over short-range nuclear missiles in West Germany, Bush signaled that he might even be up to solving NATO's most vexing problem: Keeping the alliance together as the Soviet threat becomes less tangible.

The change in the President's tone at

the May 29-30 summit in Brussels was almost as surprising as his proposals. Bush dropped his harsh questioning of Gorbachev's sincerity and took pains to encourage Soviet reforms and hold out the prospect of warmer relations with Moscow. He announced that Washington is ready to lift export controls imposed after the Soviet invasion of Afghanistan. **'TEST IT.'** After months of tentative reactions to Gorbachev's moves, Bush clearly relishes this swing to the offensive in arms control. "We're out there now with a proposal that the U.S. puts forward, and that has widespread alliance support," Bush said in comments aimed directly at Moscow. "Now test it."

The first test could come as soon as the Soviet leader's June 12 visit to West Germany (page 50). Gorbachev had intended to use the visit to widen divisions within NATO over short-range nuclear missiles based in Germany. But the agreement to push conventional arms talks forward and to defer discussion of the missiles deprived the Soviet leader of a potent issue. "These proposals will be very difficult for Gorbachev to upstage in any major way," says Ralph Earle, former U.S. arms negotiator.

Gorbachev, a master of the dramatic gesture, is sure to try. The Kremlin welcomed Bush's arms proposals as "a serious and important step in the right direction."

ction." A week before Bush's speech, Moscow had made its own proposals for deep cuts in nonnuclear forces. But Soviet Foreign Minister Eduard Shevardnadze revived Moscow's call for reducing "all categories of arms"—a not-so-veiled hint that Moscow wasn't about to give up trying to exploit growing antinuclear sentiment in Europe.

NA POWER. One new Soviet strategy, NATO analysts believe, may be to respond by raising the subject of naval arms control. The U.S. enjoys the sort of numerical advantage at sea that the Soviets hold on the ground in Europe, and Washington has always rejected talks on naval force cuts. With the Soviet navy growing obsolete, one high-ranking U.S. naval officer estimates that the Soviets could cut naval deployment by 30% and suffer only a 5% reduction in efficiency. Equal U.S. cuts would devastate America's ability to resupply forces in Europe or elsewhere in the world.

In creating his summit breakthrough, Bush posed new problems for the alliance. He offered to reduce U.S. combat troops in Europe by 20%, to 275,000, if Moscow agrees to remove some 325,000 troops from the cold war battleground of Eastern Europe. Bush also seeks to impose limits on tanks, armored troop carriers, and artillery. And the allies could slash their combat aircraft and helicopters by 50% if Moscow matches the U.S. levels.

The Bush plan violates some of the rules that have governed NATO's bargaining stance at conventional arms talks in Vienna. For one thing, he wants to speed up the timetable, hoping to sign an agreement within a year. "If the Soviets say yes—and they should, since they've said yes to every other proposal we've made—we think we can wrap this up quickly," says the State Dept. official.

That pace doesn't suit some of the allies. British Prime Minister Margaret Thatcher, who credited Bush with "transforming" the summit, believes that Bush's schedule is unreasonable for such detailed negotiations. Haste, she fears, increases the chances of dangerous, ill-considered decisions.

The allies were also thrown for a loop by Bush's reversals on issues of verification and air power. The Bush and Reagan Administrations have argued for nearly two years that manpower cuts can't be effectively verified and that reductions in aircraft would surrender a key Western advantage. This shift could set the stage in Congress for fights over verification. And the alliance will be torn by the sensitive political question of whose aircraft should be demobilized. Britain and France have already denounced any plans to cut their air forces.

But those annoyances are trivial compared with the rift over short-range missiles that Bush adroitly finessed. At a meeting that ran into the early hours of May 30, the allies, led by the U.S., acceded to West German demands for negotiations to reduce the nuclear missile forces. But after accepting Bonn's position, Bush pushed through a compromise. It calls for negotiations only after the Soviet Union begins to scale back its conventional force advantage, thereby reducing the need for the missiles.

In terms of domestic politics, German Chancellor Helmut Kohl, whose stand-

ing with the electorate had been slipping, gets a big boost. He can tell voters that he won a postponement of alliance plans to modernize the missiles that could turn Germany into a nuclear battlefield. And linking missile talks to Bush's one-year timetable on decreasing conventional arms allows Kohl to claim that missile cuts could begin as early as next year.

BUDGET PRESSURES. Bush, besides enhancing his image at home, may also win maneuvering room on difficult budget issues. Pentagon analysts believe that manpower cuts won't undermine alliance defenses in Europe as long as they're matched by bigger Soviet reductions. With budget pressures already forcing reductions in Pentagon manpower, Bush's proposal is especially welcome. "If all the troops removed from Europe under his proposal are demobilized as the President has said, the savings will be substantial," says House Armed Services Committee Chairman Les Aspin (D-Wis.).

Progress on conventional arms cuts might also make it easier for Bush to wrap up a treaty with Moscow that would sharply cut long-range nuclear weapons. Some Administration arms-control experts feel that the so-called START talks had gotten too far ahead of progress in conventional arms talks. Any deep cuts in nuclear arms, they say, only give Moscow a chance to exploit its conventional advantage in Europe.

Ever since Bush became President, European allies have worried whether he could be bold enough to take advantage of the changes that could sweep away 40 years of East-West impasse in Europe. In Brussels, Bush finally answered yes. By expanding the arms control agenda and moving the West onto the offensive in determining its military future, Bush displayed his willingness to play Gorbachev's equal in spurring and shaping détente. With the U.S. and its allies once again pulling together, he has less reason to fear that his foreign policy agenda will be set in Moscow.

By Bill Javetski in Bonn, with Jonathan Kapstein in Brussels, and bureau reports



NATO PLANES AND TROOPS MAY BE CUT SHARPLY

Commentary/by Paul Magnusson

WHISPERING THE RIOT ACT TO JAPAN

It had the feel of a new round of trade fireworks. A feisty mob of reporters packed a Washington auditorium bristling with television cameras and cellular telephones. The announcement that U.S. Trade Representative Carla A. Hills was placing Japan on a hit list of chronic trade violators drew a global chorus of oohs, ahs, and exasperated sighs.

But the May 25 targeting of Japan for possible retaliation under the Super 301 clause of the 1988 Trade Act doesn't portend any escalation of trade conflict with Japan. Instead, Hills's report was the product of fractious negotiations with Congress and within the Administration. Foreign policy officials anxious to avoid offending a key ally took much of the sting out of the Super 301 complaint. By steering clear of the most sensitive areas, the White House set the stage for a protracted gabfest on issues that Tokyo has long been willing to talk to death.

The initial muted Japanese reaction suggested that Tokyo officials knew they had dodged a bullet. The U.S. action was "highly regrettable," said Foreign Minister Sosuke Uno, the chosen successor to Prime Minister Noboru Takeshita (page 40). But Hiroshi Mitsuzuka of the Ministry of International Trade & Industry reassured officials that MITI would join talks not officially linked to Super 301. "We want a mutual, reciprocal discussion," says one Japanese business official.

NO SHOOTING. Super 301 was substituted in last year's trade bill for mandatory sanctions against countries running chronic trade surpluses. The current law allows countries up to 18 months to negotiate reductions in trade barriers to specific goods. If talks fail, the President may impose quotas or other sanctions—or do nothing if he's willing to take the political heat.

So far, most on Capitol Hill voice satisfaction with the Administration's action. Representative Bill Frenzel (R-Minn.), a critic of Super 301, called Hills's choice "as good and fair a list as can be devised." Senator Frank H. Murkowski (R-Alaska), an outspoken trade hawk, called the Administration's approach "measured and responsible." As the rhetoric cooled and Hills prepared to fly to Paris for multilateral trade talks, she noted: "You don't have a trade war unless there's shooting, and we haven't started shooting."

The USTR report was artfully crafted

of citing the Japanese retail distribution system, which is used to exclude U.S. exporters from Japanese markets. Instead, the system, Tokyo practice of steering construction work to Japanese contractors, and even Japan's high savings rate, were relegated to a study committee of the USTR and the State and Treasury Depts.

SHOWDOWN. Previous negotiations of these issues ended inconclusively during the Reagan Administration. There are no high hopes for the next round either. "With the State Dept. leading the way, there won't be much pressure for reform," says a trade official.

The 301 compromise doesn't mean that the divisions within the Administration over trade policy have closed. President Bush has adopted a more assertive stance than his predecessor, and the new trade law gives a stronger hand to hawks such as Hills and Commerce Secretary Robert A. Moeblacher. But the officials who opposed citing Japan on either economic or national security grounds—Secretary of State James A. Baker III and White House economic adviser Michael J. Boskin—weigh in if 301 is heading toward a showdown with Tokyo.

That's not to imply that the Administration's

action is an empty gesture that the process hasn't already worked. South Korea's last-minute market opening concessions on agricultural imports kept it off the hit list. Threats of sanctions may eventually persuade pragmatic MITI bureaucrats to follow suit. The real danger now isn't a trade war, but a negotiating impasse. The Japanese are "probably willing to make some procedural changes that will yield token results," says one trade official. Real progress in trade liberalization will be achieved slowly at the negotiating table, not the news conference.



JAPAN'S HIROSHI AND CARLA HILLS: THE VERY MODEL OF COOPERATION

to please both hawks and doves in Congress. Hardliners were satisfied just to see Japan's name on the list of offenders cited. But the Administration tried to soften the blow by bringing some ethnic and geographic balance to the list by including India and Brazil. Japan was cited for barriers to imports of U.S. supercomputers, satellites, and lumber. Had the Administration really wished to pick a fight, it could have named Japan's virtual ban on foreign rice or its limited purchases of American semiconductors, fiber-optic cable, or construction services.

The Administration dropped the idea



FOLEY, GRAY, AND GEPHARDT: AN ASTOUNDING CHAIN OF EVENTS RULES OUT WHAT ONCE LOOKED TO BE AN ORDERLY SUCCESSION

THE DEMOCRATS' MELTDOWN ON THE HILL

Wright is out, but the party's troubles are far from over

It was the event his fellow Democrats hoped would allow Congress to get on with business. Following a year-long probe by the House Ethics Committee and months of speculation, Speaker Carl Albert Wright finally stepped into the well of a hushed House on May 31 and said he would resign his post once a successor was chosen and would quit the House by the end of June.

As it turned out, Wright's resignation, which included a stubborn defense admitting no culpability, was hardly the anticlimax his colleagues had expected. Coming at the end of a week of startling news about other members of the Democratic leadership, the demise of Wright was just another development in what one GOP Hill staffer calls "a meltdown." Three of the top four House Democrats are now being caught up in the ethics maelstrom sweeping Capitol Hill. The majority party will patch up its shattered leadership, but the fallout will almost certainly prevent the House from accomplishing much this year.

The day before Wright quit, a shaken Democratic Caucus Chairman William H. Gray III (D-Pa.) responded to a CBS news report that he was under criminal investigation. Gray said he had been interviewed by FBI agents on Memorial Day but had been told he wasn't the target or subject of a probe into "allegations about an employee or employees." A Justice Dept. source says it's possible that the probe of Gray's office is part of a broader inquiry into alleged payroll-padding in the House.

Gray had been heavily favored to succeed House Majority Whip Tony Coelho (D-Calif.). Coelho, said to be under investigation himself for his dealings in junk bonds, announced on May 27 that he

would resign his leadership post and his seat effective June 15.

The astounding chain of events rules out what once looked to be an orderly succession. Majority Leader Thomas S. Foley (D-Wash.) is unchallenged to become the new Speaker. And Richard A. Gephardt (D-Mo.) is a prohibitive favorite to beat Ed Jenkins (D-Ga.) for the Majority Leader's job. But with Gray in trouble, the Whip's race is wide open. Candidates include Chief Deputy Whip David E. Bonior (D-Mich.), Campaign Committee Chairman Beryl Anthony Jr. (D-Ark.), and Henry A. Waxman (D-Calif.). Depending on the course of Justice's probe, Gray's tenure as Caucus chairman could also be threatened.

Democrats took some comfort, however cold, from the possibility that the leadership shakeup might rebound to their long-term benefit. Foley is well-liked and respected in Congress. And Gephardt is a tested Presidential candidate and veteran House consensus builder. "This is mainly a dark cloud for Democrats, but the rise of new leadership is the silver lining," says Democratic pollster Geoffrey Garin. Together with Senate Majority Leader George J. Mitchell (D-Me.), the Democrats hope to offer the nation a more youthful, media-conscious leadership.

Out of necessity and conviction, the

'This is mainly a dark cloud for Democrats, but the rise of new leadership is the silver lining'

new Democratic leadership will also do its best to project an image of moving ahead with the nation's business. Routine appropriations bills and must-do legislation, such as the savings and loan bailout, will probably reach the House floor this summer. And ethics legislation that would require former members of Congress to wait one year after leaving office before becoming lobbyists will get prominent floor attention. The new leaders will also seek to dampen the partisan flames that always seemed to surround the combative Speaker. Foley and Gephardt "are conciliators," says Larry J. Sabato, professor of political science at the University of Virginia. "They're bound to nudge the Congress toward consensus politics."

But whatever their intentions, the House won't soon shake off the inter-party bitterness that has been growing by the day. Democrats, feeling angry and betrayed, accuse the Justice Dept. of playing political games with criminal probes. Some believe leaks to the media are part of "an orchestrated effort by the Republican Justice Dept.," says Representative Larry Smith (D-Fla.).

'MINDLESS CANNIBALISM.' Attorney General Richard L. Thornburgh has vowed to find and punish any leakers, but both he and FBI Director William Sessions could face a rough going-over on the Hill in coming weeks. Another target for Democratic vengeance will be Minority Whip Newt Gingrich (R-Ga.), who filed the original ethics complaint against Wright. In his parting speech, Wright captured the increasingly nasty mood enveloping the House, saying: "We must resolve to bring this period of mindless cannibalism to an end."

Although Gingrich faces an ethics investigation over a partnership that promoted a book he wrote, he and other GOP leaders will try to keep the controversy alive by filing more ethics complaints against Democrats. That alone will keep the House in turmoil for weeks—perhaps months—to come.

By Douglas Harbrecht, with Paula Dwyer and Richard Fly in Washington

ARDENT'S DADDY WARBUCKS

It needs Kubota's cash to keep up in a tough supercomputer market

When entrepreneur Allen Michels first approached Kubota Ltd. about investing in his startup, Ardent Computer Inc., he gamely asked the Japanese company to put up \$20 million for a 25% stake. He knew that valuing his supercomputer maker at \$80 million was more than a little outrageous, since the ink on Ardent's business plan was barely dry. But Kubota officials agreed on the spot, and the excitable Michels had to excuse himself from the room to contain his elation.

Now, three years later, Michels has that happy feeling again. This month, Kubota will put up another \$50 million, boosting the tractor and industrial equipment maker's stake in privately held Ardent to 44%. And it doesn't come a moment too soon. The sexy, new field of graphics supercomputers, which marries the number-crunching of supercomputers with 3-D animation, has already attracted a wealth of competitors. They include startup Stellar Computer, workstation makers Silicon Graphics and Apollo Computer, and minisupercomputer maker Alliant Computer. Before long, Sun Microsystems, Digital Equipment, and other big names are expected to join. When they do, an already cut-throat market is bound to get bloodier.

With Kubota's money, however, Michels expects Ardent to do the slashing. In September, he plans to unveil a computer priced at about \$25,000 that will be as powerful as one Ardent now sells for \$79,000. That's half the price that most analysts expected for such a machine this year. A source close to the company says he won't be surprised if Michels tries to buy market share with Kubota's backing. "It's what the Japanese are great at doing," he says.

Indeed, by teaming with Kubota rather than relying solely on U.S. venture capitalists, Ardent has already gained an edge on some competitors. The new money boosts the putative value of Ardent to \$155 million—up 27% from last year. By contrast, Stellar, whose \$12.7 million in annual sales put it neck-and-neck with Ardent, is about to close a funding round at a price that slashes its valuation by a third, to \$85 million. "It's hard to pay up for an illiquid private company with an unclear future when



KUBOTA'S MATSUDA SAYS IF MICHEL'S ARDENT NEEDS MONEY, "WE THINK HOW WE CAN HELP"

the public market is paying less than one times revenues for a healthy company like Sun," says David F. Marquardt of Technology Venture Investors, which passed on the Stellar deal.

Such reasoning is foreign to Kubota. The Osaka company wants to get into growth industries such as computers fast—and it's willing to pay. "Our purpose is not capital gains," says Naohisa Matsuda, general manager of Kubota's computer subsidiary, which also builds and markets Ardent computers in Japan. "If Ardent needs money to develop the business, we think how we can help." Ardent plans to build up its sales force

and speed development of models to compete with minisupers made by Alliant and Convex Computer Corp.

Without Kubota's help, Ardent could hardly afford such ambitions. The company needed the cash infusion because it missed earlier sales targets, says Masahiro Yoshida, managing director of Kubota's office of business planning and development. The first Ardent shipment was nine months behind schedule. And, partly due to a lack of software, graphics supercomputers are selling more slowly than expected. Needham & Co. analyst Gary P. Smaby pegs 1989 sales at \$80 million—about half of what analysts pre-

WILL SUN GET BURNED BY ITS NEW PARTNER?

For nearly two years, Sun Microsystems Inc. has followed a simple but controversial strategy: By signing up other computer makers to use Sun technology to make clones of its workstations, the Mountain View (Calif.) company hopes to build enough clout to make its design a strong alternative to IBM and Apple Computer Inc. in desktop computers. But the payoff has been slow in coming. Although heavyweights American Telephone & Telegraph Co. and Unisys Corp. have lined up behind Sun, so far, only one startup actually sells a Sun clone.

On May 30, Sun showed why its strategy just might work. Japan's Toshiba Corp., a \$30 billion electronics giant, announced that early next year it will bring out a personal computer that is built

around Sun's SPARC microprocessor. It uses the same software as Sun workstations. Toshiba won't say any more about the product, but its announcement is the strongest endorsement of Sun's plan.

The risk is that Sun's haste to gain market share for SPARC-based clones could result in a corporate vendetta. Toshiba, which has an estimated 22% of the U.S. laptop computer market and is the leading seller of Sun-built workstations in Japan, will presumably sell out a SPARC laptop and other inexpensive SPARC microcomputers for both Japan and the U.S. Sun President Scott McNeely insists the Toshiba products will complement, not compete with, Sun's products. That's wrong, though, Toshiba could hurt both Japan and the U.S. With Sun angling for PC customers, "the two are like they're headed for the same market," says David Card, an analyst at research firm International Data Corporation.

Sun has little choice but to gain market share to compete with the likes of IBM, which coaxes software developers to write

are doing better than expected. says Silicon Graphics could grab a third of the market this year. "Stellar Ardent thought we were asleep at the wheel," says Forest Baskett, vice-president of R&D at Silicon Graphics. Ardent now plans to push down prices as fast as it can to attract more scientists and engineers, who use graphics supercomputers for jobs such as visualizing stress on an airplane wing. The original Stellar and Ardent machines, selling for \$1,000 and up, have been "really too expensive for a single guy," Michels confesses. As a result, both companies have slashed prices—by 50% or more.

The low-price strategy bears considerable risk. It may be too costly to sell the machines through Ardent's direct sales force. And although Michels had considerable success with computer resellers at Convergent Technologies, his previous startup, selling low-cost machines will put Ardent in direct competition with bigger players. That's why Ardent plans to stick with higher-priced hardware. "I wouldn't be anxious to compete head-to-head with Digital, Sun, and Apollo," says founder John William Poduska. Even how scrappy the market is already, he may wind up following Ardent's lead, perhaps accelerating what analysts are predicting: Unable to achieve sufficient economies of scale, Ardent is forced to sell out to a bigger company while Ardent becomes, in effect, a Kubota subsidiary. To prevent Michels and Poduska from turning diverging strategies into sales.

By Jonathan B. Levine in Sunnyvale, Calif., with bureau reports

for SPARC machines. Sun's workstations have engineering software but office software to compete with PCs. Developers demand a high-volume market, and Sun can't produce that alone. 69,000 workstations last year, compared with 12.9 million IBM-compatible machines. With help from Toshiba, insists Ardent, "we'll make the pie very, very

A MARCH. It's not that simple. Other companies such as Intel, Motorola, and Compaq are pushing new microprocessors, like Sun's, use a speedy design, RISC, for reduced instruction-set complexity. And they're winning their own backers. Intel has linked up with AMD, and MIPS has won backing from Sun. In the end, Sun's decision to sign on with Toshiba may come down to this: It's not worth losing some sales to Toshiba's ARC PCs rather than risk seeing the rival Japanese computer maker produce a rival chip. Without such a part, crank up the volume, Sun's strategy might never pay off.

Jonathan B. Levine in San Francisco

THE 'BRIDESMAID' AD AGENCY FINALLY CATCHES THE BOUQUET

But will D'Arcy Masius live happily ever after with its big new accounts?

Ad agency D'Arcy, Masius, Benton & Bowles Inc. is having the kind of year most shops only dream about. The New York agency was awarded the \$50 million Maxwell House account by Kraft General Foods Group on May 26, just nine days after nailing half of the \$215 million Burger King assignment. Those wins and a strong year for the agency's Los Angeles office bring DMB&B's new U.S. business total to \$235 million—one of the best domestic records on Madison Avenue.

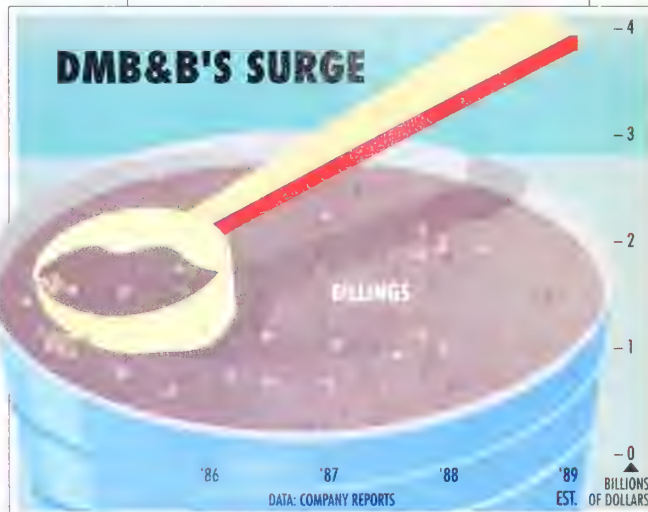
That would make DMB&B hot even amidst a boom. So it's all the more remarkable given that U.S. ad spending is expected to increase an anemic 6% this year. But the 11th-largest U.S. advertising agency can't afford to sit back and congratulate itself: Both Maxwell House and Burger King are severely troubled accounts. And DMB&B must make sure that an internal restructuring in its New York office doesn't get in the way. "Sometimes agencies gear up for pitching an account, then lose momentum," says DMB&B President Roy J. Bostock. "We've got to make sure our energy goes into servicing these clients."

NO SPARK. The splashy account wins are the first real fruits of a three-year push for new domestic business to match the strong foreign gains that helped DMB&B show billings growth of about 22% each year since 1986. The agency was created that year, when D'Arcy MacManus Masius, a Detroit-based shop with such clients as General Motors and Anheuser-Busch, merged with New York-based Benton & Bowles, known for its Procter & Gamble work. The merged firm became known on Madison Avenue as the "bridesmaid agency" after it failed to win such high-profile accounts as IBM, Pan Am, and, ironically, Burger King two years ago. Long considered strong in marketing strategy, DMB&B didn't have the creative spark needed to win such shoot-outs. Bostock says new hires and the reorganized New York office have helped produce better ads.

That may be, but the restructuring remains a distinctly untested proposition. Many agencies are trying to figure

out how best to give creative types more say in the business, but DMB&B's reorganization goes further than most. Under its scheme, creative directors and account supervisors have now become co-directors on specific pieces of business. The two disciplines—which have always been uneasy allies in the ad trade—must work much more closely than at other shops. "The new setup means more and different responsibilities for everyone," says one staffer. "It's taking a while to get used to it."

The Burger King account is also a



venture into the unorthodox. The ailing burger flipper's parent, Grand Metropolitan PLC, split the account between DMB&B and Saatchi & Saatchi Advertising Worldwide. DMB&B will create general advertising, while Saatchi will handle promotions and new-product commercials. McDonald's Corp. by contrast, uses Leo Burnett Co. as its national agency and a string of regional shops for promotions and local ads. Why isn't Burger King aping the industry leader? Grand Met figures the chain will get a more consistent message with only two shops. Also, because it won't have to oversee a bunch of small agencies, Burger King will need a considerably smaller marketing staff than McDonald's.

PARIS CAFE. The Maxwell House win poses equally tough, if more conventional, challenges. General Foods Corp. drastically cut the Maxwell House ad budget in late 1987, just as Procter & Gamble Co. began a huge marketing blitz for its rival Folgers brand. Market share for Maxwell House regular ground-roast

Top of the News

coffee shrank to 16.7% in 1988 from 18.3% in 1986, according to John C. Maxwell Jr., an analyst with Wheat, First Securities Inc. in Richmond, Va.

Bostock and Raymond G. Viault, president of the Maxwell House Div., won't say much about upcoming ads, but industry sources expect DMB&B to ditch the much-criticized campaign featuring Linda Ellerbee and Willard Scott. Ads

for Maxwell House Rich French Roast, showing a young couple in Paris, will probably continue, says Viault. "Sales for that brand have been way beyond our expectations," he says. But DMB&B must come up with its own success stories for both accounts. Otherwise its huge shot of new business may result in some severe growing pains.

By Walecia Konrad in New York

RESTRUCTURINGS

HAS THIS PROBLEM CHILD LEARNED ITS LESSON?

Kinder-Care restructures to cut debt and boost investor confidence

Building an empire of 1,235 red-steeped schoolhouses wasn't enough for Perry Mendel. In the past 2½ years, the founder and chairman of Kinder-Care Inc. has amassed an odd assortment of side businesses including two Florida thrifts, a specialty retail chain, and a deer-hunter's magazine called *Buckmasters*.

Mendel's disjointed buying spree hasn't done much for investors, who have watched their shares tumble 59% since 1987. In April, Kinder-Care's largest shareholder, SunBank, sold off its 6.9% stake in disgust. "It was a significantly unrewarding investment," says Anthony R. Gray, president of SunBank's investment group.

But now shareholders are being listened to—at least a bit. Amid persistent rumors of a takeover by Robert M. Bass of Texas, on May 29, the Montgomery (Ala.)-based Kinder-Care unveiled a complex \$215 million restructuring plan that will spin off its remaining 87% stake in its child-care subsidiary, which trades separately as Kinder-Care Learning Centers Inc. "This will clean up both balance sheets and give both companies more flexibility to grow," says the 67-year-old Mendel, who is stepping down at Kinder-Care but will stay on as chairman of Learning Centers. Wall Street partly agrees: While shares of Kinder-Care hovered around 8, Learning Centers' stock jumped 33%, to 6¼ (chart).

LIGHTER LOAD. The restructuring wasn't all Mendel's idea. The catalyst behind his maneuver is Lodestar Group, a 1½-year-old New York investment firm headed by Kenneth H. Miller, former vice-chairman of Merrill Lynch Capital Markets Inc. After the firm recently built a 4.3% stake in Kinder-Care, management quickly acceded to Lodestar's restructuring plan: The investors will guarantee a \$161 million

rights offering for Kinder-Care stock owners, who will get half a share in Learning Centers for each share of Kinder-Care. Lodestar will also buy 3.5 million shares of Learning Centers at \$5.50 apiece and will take two seats on its board.

Lodestar, which until now has only made minor investments in several smaller companies, should wind up with more than 5% of Kinder-Care and over 13% of Learning Centers. The firm's principals declined to comment on their plans but have said before that they aim to invest in companies for three or four years before selling out. Some on Wall Street believe Lodestar wants to rein in Kinder-Care's diversification and may even prod the company to sell off its laggard divisions. Others think it may take Learning Centers private.

Lodestar's cash infusion will come none too soon for Mendel's \$935 million

empire, which has been sinking under the crush of nearly \$400 million in debt, mostly at floating rates. Learning Centers' first-quarter interest tab of \$12 million halved its operating income to \$1 million. Learning Centers recently capped its exposure through interest rate swaps and is now negotiating to secure a sale-leaseback of its day-care properties. Combined with the rights offering, those measures should reduce obligations from a huge 349% of equity to 130%, estimates Jeffrey D. Adams, analyst at PaineWebber Inc.

STILL ENAMORED. The spinoff may temper the day-care centers' prospects, but the restructuring could leave the remaining companies more vulnerable to interest-rate swings: Profits from Kinder-Care's American Savings Loan Assn.—which has been whipsawed by rising short-term rates—aren't covering the interest from its \$150 million acquisition in 1988. As a result, Kinder-Care's first-quarter earnings plunged \$458,000, or 1¢ per share vs. 26¢ a year. It would have reported a loss hadn't booked 7¢ per share from its stake in Learning Centers. "What's left of the stock still boils down to is an interest rate play," says Napoleon H. Overman, an analyst at Morgan Keegan & Co.

Still, Kinder-Care's new chairman, Richard J. Grassgreen, remains enamored of the company's fortunes. "Specialty retailing is poised for the same growth as day care," says Grassgreen, the former president. He may find it tough to restore confidence along a battered Wall Street, but the restructuring could make investors give Kinder-Care a second look. Given its fall from grace, that may be the best it can hope for.

By Dean Foust in Atlanta

KINDER-CARE'S TWO STOCKS



DATA: KINDER-CARE INC., KINDER-CARE LEARNING CENTERS INC., BRIDGE INFORMATION SYSTEMS INC.



IR GRABS: THE PRICE TAG ON NORTHWEST IS IN THE \$3 BILLION RANGE

THE POWER BEHIND PAN AM'S D FOR NORTHWEST

Air Group has top names, deep pockets, and a sterling reputation

What makes the battle for Northwest Airlines Inc. so different from other multibillion-dollar takeover fights? It's being waged in total silence.

May 30, Northwest's board rejected separate bids from its own majority union, billionaire ex-oilman Marvin Davis, an investment group led by California financier Al Checchi, Pan Am, and, possibly, the leveraged investment firm of Kohlberg Kravis Roberts. Northwest and its potential buyers agreed to stay mum about the terms of the proposals, but sources among the bidders indicated that most of the bids were for \$3 billion or more. It was unclear whether Northwest's management, Chairman Steven G. Rothmeier, would propose its own plans for a leveraged buyout or special dividend.

R BANKS. With Northwest trying to keep things quiet, it was anyone's guess which bidder had the best chance of winning. But whoever prevails, what's most significant is the success that Thomas G. Plaskett, Pan Am's chairman, has had in putting together the financing committee he needed to bid. And if Plaskett is out on top, he'll owe a king-size debt to Airlie Group.

A couple of months back few airline executives or analysts would have believed that Plaskett's debt-laden com-

pany would be a legitimate bidder for another major airline. Now, Plaskett says he has lined up \$2.7 billion in bridge financing from a syndicate of major banks, including Bankers Trust, Citicorp, and Morgan Guaranty. He has also won the promise of a needed infusion of equity into the deal, with \$200 million from Prudential-Bache Securities Inc. and another \$200 million from Airlie.

The presence of Airlie Group, and its smart money, give Plaskett's offer a legitimacy it might otherwise lack. Airlie is a limited partnership with an intriguing roster of members: Sid and Lee Bass, Richard Rainwater, and the giant Equitable Life Assurance Society. Formed early this year, Airlie has ample funding: about \$1.6 billion, half in equity and half from a line of credit with major banks. The size of the fund may eventually grow to \$2.4 billion.

For such a young partnership, Airlie already has a sterling reputation. It's a successor to Investment Limited Partnership, a private fund backed by the same partners. According to Mort Meyerson, a general partner in Airlie, ILP, with over \$1 billion invested, averaged a 30% annual return for the five

years of its existence. And ILP owed much of that success to its general partner, a publicity-shy money manager named Dort A. Cameron III.

Get Cameron on the phone, and he will tell you, in a softly polite but very firm voice: "I have no desire to see my name in print." He has done an excellent job of staying out of the news, despite his reputation as one of the shrewdest investors going. Cameron was an early associate of Drexel Burnham Lambert Inc.'s Michael R. Milken, and he helped Milken form Drexel's junk-bond empire. He left Drexel long before Milken's present legal woes began, and as ILP's general partner, he was able to combine Equitable's money with his understanding of investment opportunities in such tricky areas as high-yield securities, bankruptcies, and mezzanine financings.

SHREWD MANAGER. Now, at Airlie, Cameron has a new general partner, Meyerson, working with him. Unlike Cameron, whose specialty is finance, Meyerson has had a career in operations, mostly at H. Ross Perot's Electronic Data Systems Corp., where he rose to president. At EDS, Meyerson gained a reputation as a shrewd manager who won the company some of the key contracts responsible for its phenomenal growth. Says Steve McClellan, a computer services analyst for Merrill Lynch & Co.: "Meyerson is the untold story of EDS. He really built that company."

After leaving EDS in 1986, and before joining Airlie, Meyerson spent most of his time on some big pro bono projects. He chaired Texas' Superconducting Super Collider Committee, which managed after vigorous lobbying to win that \$5.5 billion plum for Texas. He also headed a project that sought ways to turn Dallas into a mecca for commerce and culture. Beyond that, Meyerson spent some time with Rainwater trying to put together ambitious deals that never came off with ailing Texas thrifts.

Now, Meyerson, as a general partner in Airlie, is supposed to complement Cameron's financial smarts with his understanding of day-to-day business operations and costs. A Pan Am merger with Northwest makes sense to him. "My instinct," says Meyerson, "tells me that there will be a very good fit here."

Northwest's board may not agree—nor may Northwest's unions, whose cooperation is vital. But Meyerson, Cameron, and the other members of Airlie will no doubt turn up at another giant deal, quietly wielding their power and money behind the scenes.

By Christopher Power in New York and Kevin Kelly in Dallas



MORT MEYERSON



HSN'S HOME SHOPPING CLUB: THE FORMER HIGHFLIER FELL FAR SHORT OF SALES PREDICTIONS

BLAME THE PHONE COMPANY: A STRATEGY GOES ON TRIAL

Home Shopping Network wants GTE to cough up for lost business

What business wouldn't love to blame the telephone company for its problems? Electronic retailer Home Shopping Network Inc. has made a fine art of doing just that in the \$1.5 billion fraud and misrepresentation lawsuit it filed in 1987 against GTE Corp. Barring a last-minute settlement, a trial starts on June 19. The outcome is of no small importance because, as Nando DiFilippo Jr., HSN's general counsel, notes, "if we beat GTE, it's going to send a message to the entire telecommunications industry."

The message: Telecommunications suppliers will no longer be able to count on the limited liability that they've traditionally enjoyed. Phone companies, equipment suppliers, and data communications companies generally use contracts that limit their liability for lost business or, in legalese, "consequential damages." Phone companies also benefit from a regulatory shield: Their tariffs usually allow consumers to recover only the cost of lost service, not the cost of lost business. Since the limits on liability don't apply to fraud cases, HSN can have its day in court. And to help it prevail, it has hired Chicago attorney Chester T. Kamin, co-lead counsel in the 1980 case in which MCI Communications Corp. won a \$1.8 billion antitrust judgment against American Telephone & Telegraph Co.

and the seven regional Bell companies. The case was later settled out of court for far less money.

Still, "HSN has an uphill battle," says Albert H. Kramer, a Washington telecommunications lawyer who professes no great sympathy for GTE. He reasons that HSN is a sophisticated telecommunications user that should have known of problems with its communications system. There's also GTE's countersuit: Filed last November, it charges HSN with business libel and slander by embarking on a "blame GTE" campaign to solve a credibility problem on Wall Street. Says John J. Kenney, an attorney with Simpson, Thacher & Bartlett, GTE's law firm: "We're going to recover damages and show that, when in trouble, a company can't drag someone else's name up and down the street."

The suit dates back to HSN's days as a market highflier. One of the hottest new issues in years, its stock soared to \$18

**'If we beat GTE, it's going
to send a message
to the entire
telecommunications industry'**

within days of its \$7-a-share offering in May, 1986. But enthusiasm waned when the electronic retailer fell short of sales projections and began a series of aborted acquisitions and expansions. One reason for its woes, HSN insists, was GTE. HSN says the phone company misrepresented the capacity of its public phone network and the on-site switching system it installed to handle phone orders from HSN's TV viewers.

CLOGGED CALLS. Not content to wait for the wheels of justice, HSN is also courting the press. It has issued a slick booklet complete with internal GTE documents culled from thousands of pages of court exhibits. One GTE memo, dated Nov. 6, 1986, indicates that GTE knew HSN's phone system was getting clogged and questioned its responsibility. "For example, 2,500 calls were blocked in a five-minute period by our access tandem [switching center] recently when we conducted one of our sales campaigns," the memo says.

GTE's not sitting still either. Its countersuit alleges that HSN was at fault for failing to hire enough operators and for providing erratic and inadequate projections on incoming call volume. When HSN was made aware of problems, says GTE, it neglected to implement solutions because of the cost. GTE also won some backing from Florida's Public Service Commission in May when the agency reported to Howard P. Rivas, the Florida state circuit judge in Pinellas County who is hearing the case, that GTE provided adequate service to HSN. In the PSC's finding was based only on material from GTE. HSN refused to cooperate in the PSC's study, claiming the regulatory authority was biased in favor of GTE because a judgment against it could lead to a boost in phone rates.

Of course, the two sides could settle. In a report last year, litigation attorney and analyst Calvert D. Crane of the Wall Street firm Martin Simpson & Co. wrote that HSN's demands for \$20 million in compensatory and \$1 billion in punitive damages "are probably excessive." However, he concluded "that we correctly indicate that the damage award will probably be large." Today he's not so sure the fight will go the distance. "From what I know of the case," he says, "if I was representing GTE, I would not let the case go to trial."

For now, GTE and HSN are vowing to fight on. Both have a lot to lose. HSN's credibility is on the line. And limited liability has long given utilities such as GTE more legal protection than most service companies against damage claims for lost business. If HSN wins, that freedom could disappear fast.

By Gail DeGeorge in Miami

TEAM WORK



THE COOPERATION OF 5 COUNTRIES HAS
ENSURED EFFICIENCY ON THE GROUND
AND RELIABILITY IN THE AIR: AIRBUS WAS
DESIGNED AND EQUIPPED THROUGH THE COOPERATION AND
OWNERSHIP OF 4 EUROPEAN COUNTRIES AND THE U.S.A. THE
ENGINES AND AVIONICS FOR EXAMPLE, ARE PARTLY DESIGNED
AND BUILT IN COOPERATION WITH THE AMERICANS. AIRBUS
MEETS THE PRECISE REQUIREMENTS OF AMERICAN, PAN AM,
NORTHWEST, EASTERN, CONTINENTAL, AIR CANADA AND
INDIAN INTERNATIONAL WHO FLY AND WILL FLY THEIR
AIRS. THE QUALITY OF THE WORK AND THE ORIGINALITY OF
THE CREATIVE EFFORT KEEPS US UP THERE — MEET THE TEAM.



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In Business This Week

EDITED BY HARRIS COLLINGWOOD

PHILIP MORRIS FIRES UP A LOW-NIC SMOKE

► Of all the tobacco companies, Philip Morris has been the most outspoken in defending cigarettes. Yet even the industry giant has to face the realities of the marketplace. In addressing what scientists believe to be the addictive component of tobacco, Philip Morris is testing a cigarette that contains only a trace of nicotine yet supposedly tastes like a regular smoke.

The new cigarette, which is being tested under the Merit Free and Next from Merit brand names, has 0.1 milligrams of nicotine, vs. 0.6 milligrams for the regular Merit low-tar brand. Says John McMillin, a Prudential-Bache analyst: "This could be a genius move. If smokers feel better about smoking these cigarettes, they may not notice they're smoking twice as many of them."

AN LTV UNIT FORGES A WORKER BUYOUT

► Joining the rush toward employee ownership, 4,900 salaried and hourly workers at eight LTV plants agreed to buy the company's steel-bar products unit for an estimated \$200 million to \$300 million. The sale will enable LTV, which is reorganizing under Chapter 11, to shed a product line that faces rising competition from smaller, more efficient minimills, which make steel from scrap metal. The ESOP's union is negotiating a new contract to replace one that starts expiring as early as next year.

AVON SLAMS THE DOOR ON MARY KAY

► Another unwelcome suitor is calling on Avon Products. On May 30, Avon rejected an overture by Mary Kay, a privately held direct-sales cosmetics company with annual

revenues of about \$400 million. Mary Kay had expressed interest in linking up with Avon, which has revenues of \$3 billion, in a merger or leveraged buyout. That move follows an unfriendly \$2 billion bid from direct-seller Amway, which has since dropped its offer.

Avon CEO James Preston says his company is not for sale. But if a would-be buyer gets tough, Avon, with its \$1 billion debt load, won't have many defensive options.

AT&T'S NEW PACT ON UNION BENEFITS

► AT&T is changing in response to the thousands of women who have joined the company since the 1960s. Under new agreements covering 160,000 unionized employees, the telecommunications giant will provide \$5 million in seed money to local day-care centers that give priority to AT&T families. It also will double the length of unpaid leaves to care for children or seriously ill dependents, with full benefits extending through the first six months.

AT&T drove a hard bargain: Union members in phone operations will receive an 8.75% wage hike over three years, much less than anticipated inflation. Manufacturing employees will get 6.5%, plus an initial lump-sum payment of

IT DOESN'T PAY TO EAT A 2-INCH ROACH

At the Chicago Board of Trade, people hardly notice when a futures trader eats a \$1 million loss. But on May 26, the feast consisted of a 2-inch American cockroach, and that halted all other activity in the Treasury note pit. The bug was perched on the tongue of Brian Waller, a trader's clerk who consumed *la cucaracha* in response to a \$200 dare. "He bit it and turned around so everybody could see it, including the visitors' gallery," said Geoffrey Getz, a trader who witnessed the incident.

Waller's feat amazed traders and runners from adjacent pits, who flocked to the spectacle and chanted: "Eat it, eat it." But the bite bugged floor officials, who collared Waller and began disciplinary proceedings leading to a \$1,000 fine for disrupting trading. Waller, who couldn't be reached for comment, was later fired. There's another entry in the CBOT book that might better fit his offense, though: No eating on the floor.

8%. A profit-sharing plan could add a small bonus if profit goals are met.

ROD HILLS DOES BATTLE WITH OAK INDUSTRIES

► It seems as if the Hills family can't avoid controversy these days. While U.S. Trade Representative Carla Hills was citing Tokyo for unfair trade practices (page 24), husband Roderick Hills is waging a proxy battle to win control of Oak Industries.

Rod Hills, a former Securities & Exchange Commission



chairman, will offer a person slate of directors to Oak Industries shareholders to meet in San Diego on June 1. A board member since 1981, Hills learned he was ousted after he and Oak Industries Chairman E. McNeely battled over the electronics company's action and business strategy. Hills has the support of a don-based MIM, which owns 25% of Oak. McNeely has responded with a letter to shareholders that, among other things, questions Hills' business ability.

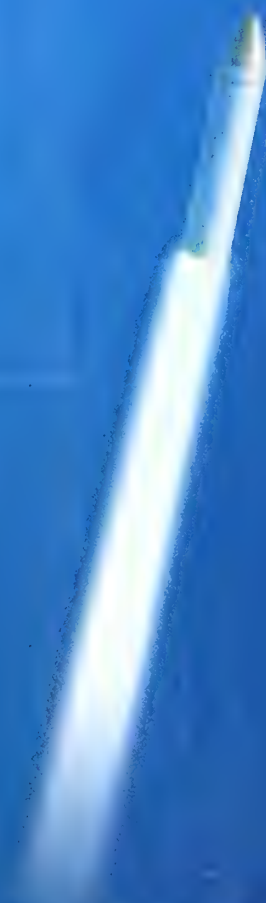
A HIGH-TECH PRESIDENT FOR IBM

► IBM has installed its top engineer in the president's office. The promotion of Chairman Jack Kuehler signals the importance of technology in the computer giant's struggle to raise sales and earnings momentum. While Kuehler, 56, is seen as likely to succeed Akers as chairman and chief executive, the new post will give him more influence over IBM's strategic attempt to integrate its diverse product lines and capitalize on its strength in mainframes.



THE GREAT LEAP SOMEWHERE

TEAM WORK



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LEAR IRBM AND SLBM MISSILE SYSTEMS, THE HEART OF
FRENCH DETERRENT FORCE. AEROSPATIALE ALSO BUILDS
MISSILES AS EXOCET, ERYX AND ASTER AND PARTICI-
S IN COMMON RESEARCH AND DEVELOPMENT PROGRAMS
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A MOVING PICTURE.

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And every TV is subjected to the strictest quality control at our plants here in the U.S.

Images and sound you not only see and hear, but feel. That's Toshiba's goal for all its TVs, VCRs and camcorders.

After all, we're not in this business for our own entertainment. We're in it for yours.

Super Tube™ is a trademark of Toshiba Corp.

In Touch with Tomorrow
TOSHIBA



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EMPTY-OFFICE SYNDROME IS HURTING BUSH'S MANDATE

When President Bush, fresh from his triumph at the NATO summit, rolls into Washington on June 5, his political stock will be high. With congressional Democrats in disarray, Bush has an opportunity to reassert his leadership and give his stalled domestic agenda a push. Troubled, the foot soldiers of the Administration—the key sub-cabinet officials who can turn good intentions into policy—are yet to report for duty.

Five months into the Bush Administration, more than half the jobs subject to confirmation are vacant. At the Labor and Housing & Urban Development Depts., only the Cabinet secretaries have been confirmed. Just 4 of 40 top Pentagon officials are in place. Throughout the Administration, gaping holes are being filled by Reagan Administration holdovers eager to escape, by "acting" senior bureaucrats, and by nominees-in-waiting who are working as "consultants."

KEY HANDICAPS. These unofficial consultants accomplish a lot. For example, Treasury Under-Secretary Robert Glauber and Assistant Secretary David Mullins drew up and launched the Administration's well-received savings-and-loan reform plan before their nominations were sent to the Senate. In most cases, however, consultants labor under heavy handicaps. They can't represent the Administration at congressional hearings, sign off on regulations, or even hold a press conference. Cabinet Secretaries are forced to attend meetings to which they would send a deputy—if they had one. And some sensitive policy areas are off-limits. Roderick A. DeArment, who has been nominated but not confirmed as Deputy Labor Secretary, has been barred from some White House meetings because he isn't "official."

The adverse effects of Bush's skilled-labor shortage are particularly acute at the Energy Dept. During the campaign, Bush promised to clean up dangerous waste at the government's nuclear weapons plants. But Energy Secretary James Watkins hasn't been able to carry out the President's

pledge because he can't fill key jobs. Watkins has offered the job of Assistant Secretary for defense programs to four candidates, but all have turned him down. The reason: Each is earning at least three times the \$80,700 the Energy job pays.

In some cases, the lack of top appointees is crippling policy formation. For example, congressional tax-writing committees are anxious to simplify rules, called Section 89, designed to make sure that employee-benefit plans don't discriminate in favor of highly paid workers. But the three top jobs in the Treasury Dept.'s Office of Tax Policy are vacant, and the department has been unable to offer a position on the Section 89 overhaul. As a result, an issue of vital interest to business is stalled.

BOTTLENECK. White House personnel chief Chase Untermeyer gets most of the flak for the slow pace of appointments. Untermeyer says the ethics environment demands thoroughness. "Everybody expects us to thoroughly screen people, choose those who are able, and get them through the process," he says. "Do people really expect us to do that in a matter of days or weeks rather than the months it does take?"

At this point, even a dramatic speedup by the White House might not get the jobs filled much faster because the Senate has become a major bottleneck. There are more than 50 nominations pending, not counting ambassadors and judges, and the backlog is likely to grow. "The view on Capitol Hill is, 'If the White House can take two months, why should we do it in one week?'" grumbles a nominee whose name was sent to the Senate nearly two months ago.

Signs of a leisurely appointment process began appearing shortly after Bush took office, prompting some Republicans to warn that it would be June before the Administration was in place. Turns out they were optimists. Bush will now be lucky to have all his key people in place before Congress' August recess—and the Administration will be hard pressed to make up for the months it has lost.

By Richard Fly, with bureau reports



CHASE UNTERMAYER

FEDERAL RESERVE

FED
A simmering dispute between the White House and the Federal Reserve Board has cooled for the time being. The Bush Administration is unhappy both with the current level of interest rates and with the newfound strength of the dollar. Officials would like to see the Fed drive down rates by easing the dollar. But policymakers, still stung by the backlash against an early round of Fed bashing, are keeping mum. One White House economist, asked if the central bank should ease or stand pat, cautiously answered the call "a tossup." He stresses that Fed Chairman Alan Greenspan

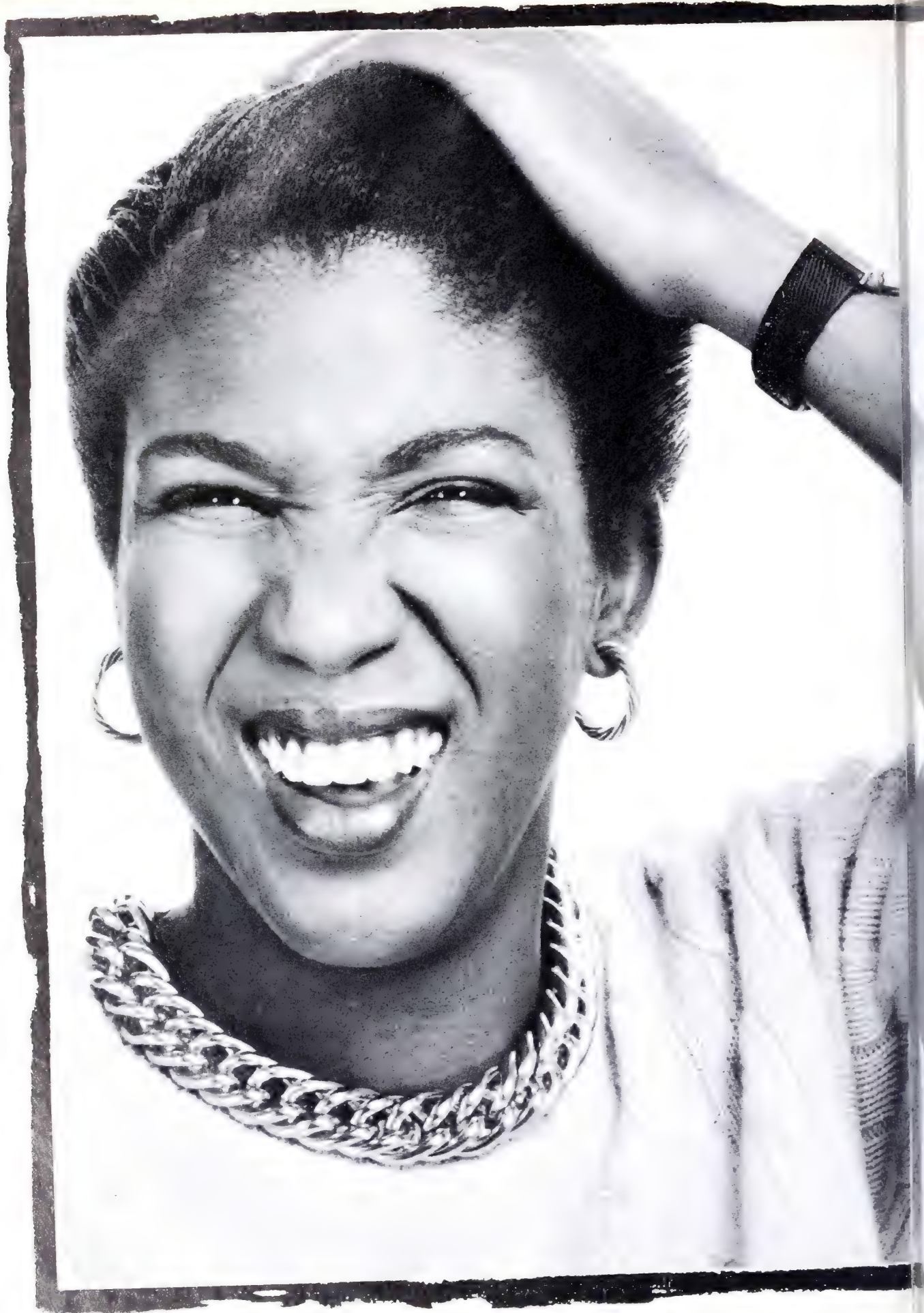
has to protect his inflation-fighting credibility. The Administration's silence is frustrating to doves on the Fed board, who would like some support in their fight for lower rates.

SECURITIES

Chairman David S. Ruder is leaving the Securities & Exchange Commission a parting gift—a new enforcement chief. Before returning to teaching this summer, Ruder plans to name a replacement for Gary G. Lynch, who's leaving for a law firm. Top candidates: Associate Enforcement Directors John H. Sture, Joseph I. Goldstein, and William R. McLucas, and chief trial lawyer Thomas C. Newkirk.

SPACE

The new National Space Council, headed by Vice-President Dan Quayle, is having a tough time getting going on long-term policy. The council's first effort was salvaging an earth photo program when Landsat ran out of money. Now, it's concerned with saving the planned Aerospace Plane as the budget-starved Air Force threatens to pull out of the project. The most important question facing the council is whether to endorse President Reagan's \$25 billion manned space station. But one member says the panel has been too busy "fighting brushfires" to give the issue much time.





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WILL THE RECRUIT SCANDAL JUST GO AWAY?

The LDP is betting that probable Prime Minister Sosuke Uno can hold the fort until it does

Japan's ruling Liberal Democratic Party is trying to extricate itself from one of the sorriest chapters in its history. On May 29, Tokyo prosecutors announced they would end their investigation of the Recruit Co. bribery and influence-peddling scandal—without indicting a single top politician. The LDP also appeared certain to select Foreign Affairs Minister Sosuke Uno as new Prime Minister, replacing Noboru Takeshita, who on Apr. 25 announced his resignation because of the scandal. Uno will

of last year's trade law was to refuse to negotiate.

Although powerful bureaucrats carry out Japan's trade policy, politicians are needed to mediate turf battles between ministries. As the Recruit crisis dragged on, the smooth functioning of the bureaucracy seemed strained. The Post & Telecommunications Ministry abruptly terminated negotiations with Motorola Inc. over access to Japan's cellular telephone market. A strong Prime Minister might have forced the recalcitrant minis-

spread millions of its shares among the upper reaches of Japan's political, business, and media circles to gain influence.

The Japan Socialist Party, among others, is upset that the nine-month Recruit legal probe ended without any top politicians being indicted. The highest prosecutor went was Takao Fujinami, Nakasone's former Cabinet secretary. The Socialists are threatening a boycott of the Diet session at which Uno will be named unless Nakasone comes before the upper house and all evidence in the



◀ SOSUKE UNO

Uno may lack the clout to respond forcefully to trade pressure from the U.S. That may ensure Takeshita a role as 'shadow shogun'

NOBORU TAKESHITA ▶



have the unpleasant task of leading the LDP into crucial upper house elections in July in which the party is almost certain to lose seats.

One reason for trying to end the chaos within the LDP is renewed trade pressure from Washington and rising concern from some of Japan's allies that it seemed to be drifting on international issues. The Bush Administration's decision on May 25 to list Japan as an unfair trading partner in satellites, supercomputers, and lumber products (page 24) accelerated the need for the Japanese to settle on a leader to deal with the Americans. Japan's initial reaction to the U.S. decision under the "Super 301" provision

try to open the market fully, just as Takeshita arm-twisted the construction and agriculture industries last year. At the same time, the Finance Ministry and Bank of Japan sent out confusing signals on interest rates and support for the yen, leaving the impression of a rulerless financial policy.

BIG FISH. The party is hoping to respond to these challenges, but it's not certain the Recruit crisis is finished. The LDP's overall loss of popularity could linger for months. Some party members are angry that former Prime Minister Yasuhiro Nakasone left the LDP but has not resigned his Diet seat. It was during Nakasone's five-year reign that Recruit

investigation is made public. The Socialist threat may prove to be little more than an irritant because the LDP has the votes to name Uno. But the Socialists and the media could keep alive the suspicion among disgruntled voters that the really big fish got away.

Takeshita had difficulty in finding a successor. The LDP's first choice was former Foreign Minister Masayoshi Matsuoka. Despite weeks of cajoling, Itade declined when party leaders refused to solve the LDP's numerous competing factions or give up their seats to make amends for the Recruit scandal.

A month after announcing that he would resign, Takeshita settled on an

Although he's a member of the Nasone faction, Uno is one of the few LDP politicians not linked to the Recruit scandal. A veteran of several Cabinet posts, Uno has traveled widely and is regarded as able to hold his own in international affairs. "Uno just seems to be the perfect compromise," says an aide to an LDP Diet member. The son of a rich sake brewer, Uno writes haiku, plays the harmonica and piano, and is also qualified to teach kendo, Japanese fencing.

But many government officials and political analysts question Uno's ability to tackle the tough issues facing Japan, particularly trade. His critics say that while Uno is articulate and intelligent, he lacks the political clout to coordinate a response to Washington. Because of his weak power base within the LDP, he "won't be able to push through drastic new policies," says Takeshi Sado, a political science professor at Tokyo University.

BEHIND THE SCENES. That may suit Takeshita just fine. By picking Uno to succeed him, Takeshita ensures a role for himself as a "shadow shogun" in the next government. Uno "is just going to be an actor directed behind the scenes by Takeshita," according to one government official.

Uno's immediate task will be responding to Washington's decision to identify Japan as an unfair trading nation. Japan says it cannot negotiate on satellites, supercomputers, or lumber while the U.S. brandishing the threat of retaliation. Instead, the Ministry of International Trade & Industry is trying to come up with an alternative framework, partly to save face for Japan. By turning the issue into a broader, two-way dialogue about the countries' economic relationship, the Japanese will also try to keep pressure on the Americans to fix their own problems, such as the federal budget deficit.

Most think Uno's tenure will be brief. When the Recruit affair blows over, Takeshita is expected to pave the way for Secretary-General Shintaro Abe to become Prime Minister. Abe backed Takeshita as Premier and was slated to succeed him. But revelations that his secretary made a killing by selling cheap shares in a Recruit subsidiary have put him out of the running for now.

When Takeshita gets his way, Uno will be a utility infielder who does his job and leaves. The LDP will be able to close ranks following the crippling Recruit affair, and Takeshita will still wield considerable behind-the-scenes power. The key question is whether Japanese voters will accept a return to business as usual. With Japan's economy on a roll, chances are they will.

by Amy Borrus and Neil Gross in Tokyo

HONG KONG



POPULAR CAUSE: HONG KONG STUDENTS MARCH TO DEMAND DEMOCRACY ON THE MAINLAND

HONG KONG'S FUTURE SEEMS EVEN MORE IN DOUBT

The colony thought China would give it a long leash—until last week

On Sunday, May 28, Chinese all over the world took to the streets to protest Beijing's hard line against its student demonstrators. But the tiny British Crown colony of Hong Kong was home to the largest demonstration of all. An estimated 1.2 million marchers—an astounding 20% of the total population—carried homemade placards and shouted emotional slogans. Some banners said: "Today, China; Tomorrow, Hong Kong."

Although China's power struggle was still raging, the impact on Hong Kong already was profound. The basic terms China is proposing for running Hong Kong after Britain relinquishes control in 1997 are under assault from 5.8 million newly politicized Hong Kong residents. Many had hoped China would keep its promise to allow their enclave to maintain its freewheeling capitalist ways, but Deng Xiaoping's apparent plan to purge Communist Party boss Zhao Ziyang and the reappearance of the party's Old Guard has worsened fears that such hopes were too optimistic. More Hong Kong Chinese are now going to "stand together and start to fight for their interests," says Lee Wing Tat, a chief march organizer.

CRITICAL ARTICLES. Several local politicians who had been working closely with Beijing also are having second thoughts. Louis Cha, a newspaper editor who had proposed a compromise with Beijing on the sensitive issue of direct elections, re-

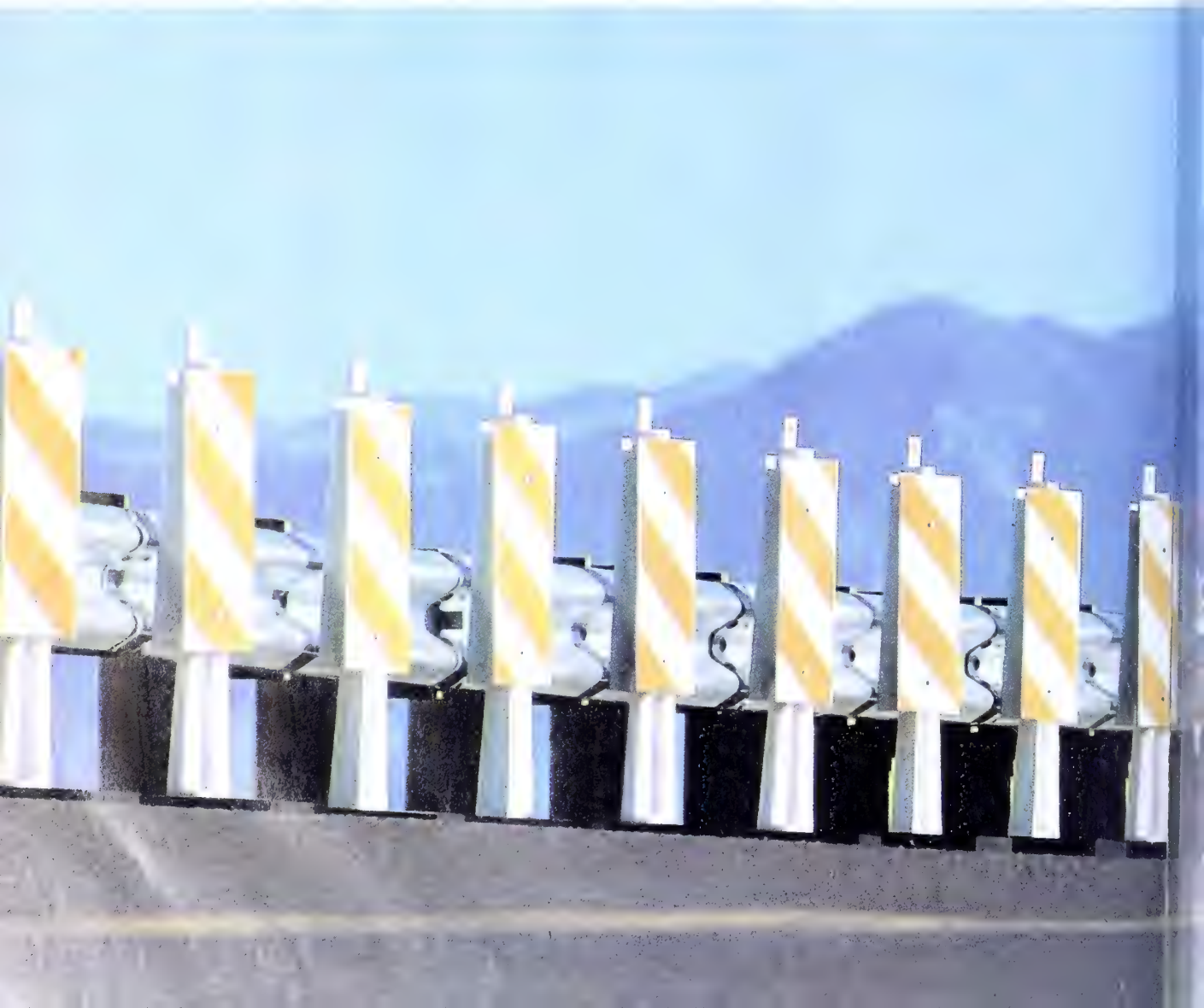
signed from a committee that is drafting a "Basic Law" to guide Hong Kong after 1997.

Most extraordinary, the upheavals in China have split the Communist community in Hong Kong, allying liberal Communists with church groups, student activists, and middle-class professionals. A pro-Beijing labor leader has criticized the government's moves, and some pro-Beijing newspapers that have loyally followed China's line for decades have published critical articles.

After years of wrangling among Hong Kong politicians, Beijing's hard line has galvanized support for earlier and broader elections in Hong Kong. On May 30, the advisory and legislative bodies of the Hong Kong government—both dominated by colonial appointees—agreed to recommend that Hong Kong's chief executive be chosen by direct elections no later than 2003, nine years earlier than Beijing has proposed. "While the events have understandably led to confusion and anxiety for many, they have also brought the community together in an unprecedented way," says Legislative Council member Allen Lee.

The power struggle in Beijing also is freezing some business plans. Hong Kong developer Gordon Wu had to cancel a \$496 million rights issue on the Hong Kong stock exchange because of a 12% drop in the market after China declared martial law. Part of that amount had been earmarked to fund a \$770 mil-

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lion superhighway in southern China.

Smaller investors, especially, are getting nervous. "They don't believe anybody's in charge. They just don't know if contracts signed now will still be valid when the new powers get in," says Eric T. Kalkhurst, a Hong Kong-based business consultant.

Some Hong Kong Chinese are voting with their feet—and money. In a poll

taken on May 22-24, nearly 37% of Hong Kong residents said they wished to emigrate before 1997—up six percentage points from a similar poll taken in February. Canada and Australia are the favored destinations.

In Vancouver, Steven C. Funk, president of a venture-capital fund that helps Hong Kong Chinese buy their way into Canada, says there is a marked increase

in walk-in inquiries. Hong Kong citizens who bring more than \$210,000 into Canada get speedy landed-immigrant status. Indeed, as China's shock waves wash over Hong Kong, everyone is coming to realize that what a few old men in Beijing decide one day can be changed the next.

*By Dori Jones Yang and Dinah Lee
Hong Kong*

EUROPE

THE EUROPEAN PARLIAMENT GETS ITS ACT TOGETHER

With elections on June 18, it is emerging as Europe's new powerhouse

Once a month, hundreds of lawmakers from Ireland to Greece gather in the sumptuous concrete-and-glass Palais de l'Europe in the French city of Strasbourg for a week-long session of the European Parliament. This time around, the hot issue is TV. As a crowd of angry French filmmakers marches on the plaza outside, demanding curbs on American television programs, a Bush Administration lobbying squad pounds the Parliament's long corridors to argue for free trade.

In the lobbyists' briefcases are copies of a letter from U.S. Trade Representative Carla A. Hills threatening retaliation under the new trade law if the Parliament restricts the \$650 million in American TV fare sold in Europe each year. But the threat is to no avail.

On May 24, the Parliament voted to require European Community broadcasters to run "a majority of European works" in entertainment lineups beginning in 1990. The measure now heads for the European Council of Ministers, which is expected to adopt it on June 14.

POWERHOUSE. In TV and other areas, the EC's Parliament suddenly is emerging as Europe's new powerhouse. As-

sertive, increasingly protectionist, and decidedly populist, Strasbourg styles itself as the voice of the EC's 320 million citizens. If all goes right, the Parliament could become something akin to a legislature for Europe. In health, safety, and other common areas of regulation, gov-

ernments of EC states will have to abide by its rulings.

While Strasbourg can't initiate legislation in congressional fashion, it has something almost as good—a veto over many EC decisions. In fact, most Parliament members now vote U.S.-style, forming party caucuses that surmount national political interests. The Parliament can strike down directives originating with the Brussels-based European Commission. It can also bar treaties between the EC and nonmember states. And it's not averse to stepping on a few toes in its work (table).

Strasbourg's importance has grown enough that Europewide parliamentary elections scheduled for June 18 are attracting as much interest as a national political contest. In Britain, the Parliament vote is the first nationwide election since 1987. Conservative Prime Minister Margaret Thatcher's rivals in the Labor Party are campaigning hard on such issues as a proposed European "social charter" to protect workers' rights. "Don't let Labour in through the back door," threatens one Conservative campaign billboard.

In Germany, may voters see the Parliamentary contest as a vote on the future of embattled Chancellor Helmut Kohl. A proposal showing by the ruling center-right coalition could fuel a "Duisen Kohl" movement at next September's congress. The chancellor's Christian Democratic Union party. That could be Kohl replaced by a "red-green" coalition of Socialists and environmentalists in 1990.

While the Parliament can affect national id-



THE EUROPARLIAMENT FLEXES ITS MUSCLES

TELEVISION

- Orders that by 1990, majority of EC entertainment programming be produced in Europe. Council of Ministers expected to approve

ENVIRONMENT

- Requires that new small cars use catalytic converters by 1991
- Votes nonbinding resolution seeking to ban chlorofluorocarbons. Vote pushes European Commission to call for global conference on ozone layer
- Expected to ban tropical timber imports to protect Amazon forests

HEALTH

- Bans imports of \$100 million worth of hormone-treated U. S. beef

TRADE

- Rejects trade agreement with Israel over its policies in West Bank

DATA BW



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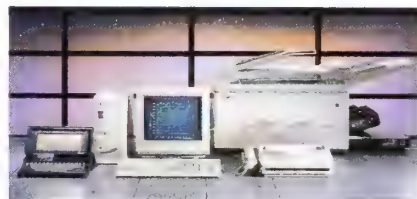
Success is made of a lot of small but important decisions. Like choosing office automation equipment. It should be state-of-the-art, affordable, and it

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...it lacks clout in key areas. With no power to tax, national governments control the Parliament's purse through the budget, which comes from import tariffs and a 1.2% levy on members' valued tax receipts. European Commission bureaucrats also draft the regulations that make the EC tick. But in the past year, the Parliament has unveiled a surprisingly large list of powers. In fact, German Parliament member Otto von Habsburg now estimates that "half of the legislation that comes out of the Bundestag is based on directives from the EC."

STRESS EUROPE. In helping set the agenda for post-1992 Europe, the Parliament is placing economic nationalism high on its agenda. Carla Hills, for one, says that the Parliament's recent TV special "sends a message to Americans that the EC 1992 initiative is, indeed, being used as an excuse to construct a stress Europe." But many Parliament members are unmoved. "I want to protect European integrity in a number of areas, like cars, electronics, and aerospace," says British Labor delegate Carling Tongue.

Parliament members haven't always been so outspoken. The founding fathers who created the European Community in 1958 organized it more like an international organization than a federal republic. The tide began to turn when voters in electing members of Parliament started in 1979. But much of the Parliament's new muscle has come from the increased powers it gave itself in the 1987 act that abolished EC internal trade barriers by 1992.

Now, ambitious members of the Parliament are bent on grabbing power from the national governments, whose power lies in the 12-member Council of Ministers. In the past, amendments when the council exercised its right to overrule parliamentary votes. But in the Parliament and the bureaucratic elite of the Brussels commission are on a measure, only a unanimous vote by the council can overrule them. It's getting hard to assemble such a vote. Lately, the Parliament has imposed itself by forming an effective alliance with the commission. The two bodies recently stymied efforts by council ministers from France and Spain to block a preliminary ruling that new cars must be equipped with U.S.-type catalytic converters by 1991. The measure probably will become law in June.

As the Parliament rises in prominence, its role is becoming a key issue. Until now the Parliament has been dominated by a moderately conservative majority. In the June elections, a shift of just a few seats could give the moderate left

control for the first time. The environmentalist Greens alone are expected to gain 12 seats. A leftward shift would most likely strengthen the Parliament's interventionist economic bent.

WORST NIGHTMARE. In Britain, Thatcher's staunch opposition to full-scale EC integration is giving the battered Labor Party a new lease on life. Once a bastion of British nationalism, the Laborites are styling themselves as the new party for

EC headquarters in Brussels. Corporate executives and diplomats are also hitting Strasbourg with an "enormous" effort, says Parliament President Lord Plumb. Last October, for example, Fiat Managing Director Cesare Romiti joined colleagues from France's Pechiney and Holland's Philips in a round of talks with the entire Parliament on European industrial strategies. Romiti suggested that the Parliament adopt a broad auto



OTTO VON HABSBURG SAYS HALF OF GERMANY'S LEGISLATION IS BASED ON EC DIRECTIVES

Europe's workers. "To them," Labor leader Neil Kinnock says of the Tories, "the future is deregulation without social obligation." With one poll predicting Labor will pick up eight seats, some observers speculate that Prime Minister Thatcher is headed for her worst nightmare: A Socialist-led Parliament forcing Britain to accept policies the Tories would never adopt at home.

Many in the Parliament see Strasbourg, rather than their own national capitals, as the fast track to glory

No matter which side of the aisle they occupy, many of the Parliament's hottest new talents see Strasbourg, rather than their own national capitals, as the fast track to political glory. It's a stunning change—and a clear sign of how fundamental the new European power shift really is.

Lobbyists are increasingly concentrating their efforts on both Strasbourg and

policy spanning such issues as pollution standards, safety regulations, and Japanese competition.

Corporations aren't the only ones that are eyeing the Parliament in a new light. In October, America's C-Span cable-TV network plans to broadcast a phone-in show that will let viewers across the U.S. to pose questions to Parliament members. And filmgoers the world over will soon be treated to a new British thriller, *Paris by Night*, in which Charlotte Rampling plays a Tory member of the Parliament who becomes caught up in a murder.

For a legislature that was once considered a political dumping ground, the sudden burst of interest comes as something of a vindication. More important, many believe that it shows the Parliament is at long last beginning to capture people's imaginations. In just a few years, says Lord Plumb, the Parliament "has changed beyond all recognition." In so doing, it is helping to forge a European identity, without which the single market will never go beyond the realm of economic integration.

By Blanca Riemer in Strasbourg, with Richard A. Melcher in London and bureau reports

EUROPE'S SHORT-RANGE MISSILES NAIL THEIR FIRST VICTIM

Elated by the settlement of a dispute within NATO over short-range nuclear missiles, Chancellor Helmut Kohl crowed that allied leaders were "all winners" at NATO's May 29-30 summit in Brussels (page 22). But West German Foreign Affairs Minister Hans-Dietrich Genscher, who had sought a NATO showdown on the issue, was a clear loser.

For years, Genscher has promoted a wide-ranging détente with the Soviet Union, keeping lines to Moscow open even at the height of tensions over the Soviets' 1979 invasion of Afghanistan. In the latest version of "Genscherism," he hoped to prod NATO to agree to early talks with Moscow on removing short-range nuclear missiles from Central Europe. At the same time, Genscher tried to stir hopes of eventual reunification of West and East Germany. For Genscher and his small Free Democratic Party (FDP), the junior partner in Kohl's governing coalition, these issues have powerful appeal among West German voters. But they make the country's allies nervous about the West Germans' commitment to NATO. President Bush's offer to negotiate deep cuts in NATO and Warsaw Pact conventional forces helped smooth over the missile dispute and in effect pulled the issue out from under Genscher.

RIPE ISSUE. If the Soviet threat in conventional weapons diminishes, it will be harder for the U.S. and other allies to argue that the short-range missiles are still needed, but the issue is now on the back burner at least until West Germany's federal elections in late 1990.

Genscher's push for negotiations on short-range missiles was a bold gamble, largely driven by domestic German politics. With his party showing badly in recent elections, he hoped that he could use this vote-getting issue either to get rid of the missiles or to win nationalist votes for Genscher's stand, even at the cost of splitting NATO. Last January, the Free Democrats were dropped from the local legislature in Berlin because

the party failed to win the minimum 5% of the vote required to qualify for seats, and it looked as if it would fare badly in other contests. Although Genscher has managed to serve continuously as Foreign Affairs Minister for 15 years—in successive FDP coalitions with the Social Democratic Party and with Kohl's Christian Democratic Union—the FDP needs to maintain its own identity by pursuing policies that are sometimes at odds with its bigger partners'.

Bush's address in Brussels, however, gave Kohl the opportunity he needed to stall Genscher's push for a showdown on the missiles. Kohl told his advisers that he wanted a solution to the growing NATO crisis over this issue. Kohl won and Genscher lost because Kohl was willing to compromise but Genscher couldn't afford to. In Kohl, Bush's broad proposal to reduce tanks, soldiers, and aircraft has changed the political ground rules by providing a disarmament plan with wide voter appeal that Kohl can support.



GENSCHER PUSHED FOR TALKS—AND LOST

HELPFUL IMAGE. When Soviet President Mikhail S. Gorbachev arrives in Bonn for a June 12-15 visit, he'll be getting an explanation of NATO's latest move from Kohl and Genscher. Ironically, both leaders had been seen in Washington and London as too easily influenced by Gorbachev's long-running "charm offensive." Now, Kohl will be able to project an image to German voters of having rescued NATO from a looming crisis. But Genscher's push for détente may have backfired by reinforcing West Germany's ties to NATO under stronger U.S. leadership.

The result, for Gorbachev, is to dim any hope that the Soviet leader may have had of loosening West Germany's links with the Western alliance. That will reduce the incentive for Gorbachev to put the reunification of East and West Germany on the agenda of détente.

By John Templeman and Gail Schares in Bonn

GLOBAL WRAPUP

ARGENTINA

Triggered by the country's continuing economic slide, riots and looting in major cities forced President Raúl Alfonsín to declare a state of siege at the end of May. But Alfonsín, a lame duck whose five-year term ends on Dec. 10, lacks political clout for decisive actions to shore up the economy. And the army, resentful of punishments during Alfonsín's term for earlier human-rights abuses, appears reluctant to help police quell the riots.

Staying on the sidelines, so far, is Peronist President-elect Carlos Saúl Menem. Aides say he intends to base his proposed "productive revolution"

on ideas of University of Pennsylvania's Nobel prizewinning economist, Lawrence Klein. But despite calls for an accelerated presidential succession, Menem seems reluctant to step in before Dec. 10 with his fresh mandate to try to halt the economic tailspin.

ISRAEL

A speech on May 22 by Secretary of State James A. Baker III, urging Israel to give up land for peace, is seen in Jerusalem as a harbinger of new U.S. moves for an Arab-Israeli settlement. Israelis also see growing signs of U.S.-Soviet coordination of Mideast policy. Soviet Foreign Minister Eduard Shevardnadze, like President Bush, has

cautiously endorsed Prime Minister Yitzhak Shamir's proposal for elections in the West Bank and Gaza.

Hardening political lines in Israel, however, may block peace moves. Outside Shamir's Likud Party, the election proposal is opposed by leaders such as Commerce & Industry Minister Ariel Sharon and Housing Minister David Levy. And the Likud's central committee may reject the plan.

If the plan stalls, the Labor Party may find it difficult to stay in the national unity coalition. But the political right's growing strength may rule out any chance that new elections would produce a government with broad support for a settlement.

No title in golf is more difficult to capture or more prized than the U.S. Open. Beyond the competition of some 156 of the game's best players,



Oak Hill Country Club, site of the 1989 U.S. Open.

the Open champion must contend with a course on which greenskeepers have been instructed to narrow the fairways, nurture the rough, and bring the greens to championship speed.

The stature of today's event could hardly have been foreseen by the golfers at the first Open. There were just eleven that October day in 1895, and only 200 spectators to cheer them through 36 holes at the Newport Golf Club. Briton

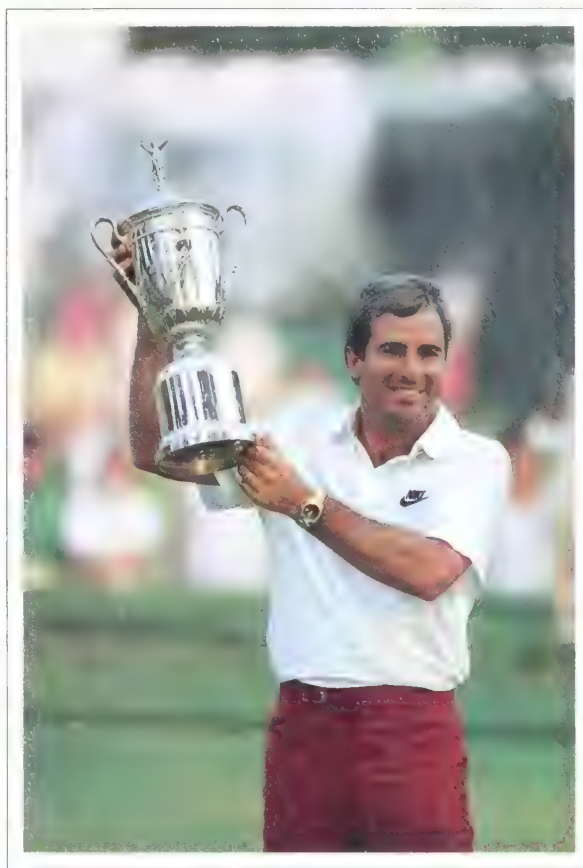


1911: John J. McDermott, first American to win.

Horace Rawlins bested nine fellow pros and one amateur to win a medal and a modest cash prize.

Americans had to wait sixteen years for one of their own to take the title. John J. McDermott did it in 1911.

Today as many as 6,000 entrants vie for a spot in the field, and professionals



Curtis Strange, winner of the 1988 U.S. Open.

The U.S. Open and Rolex: two of the game's most venerable names.

play for a total purse of more than a million dollars. But beyond the financial rewards is the immortality achieved in having one's name etched on the championship silver trophy.

At an event so distinguished it has become a classic, it isn't surprising that a classic timepiece is so often the one of choice—Rolex.



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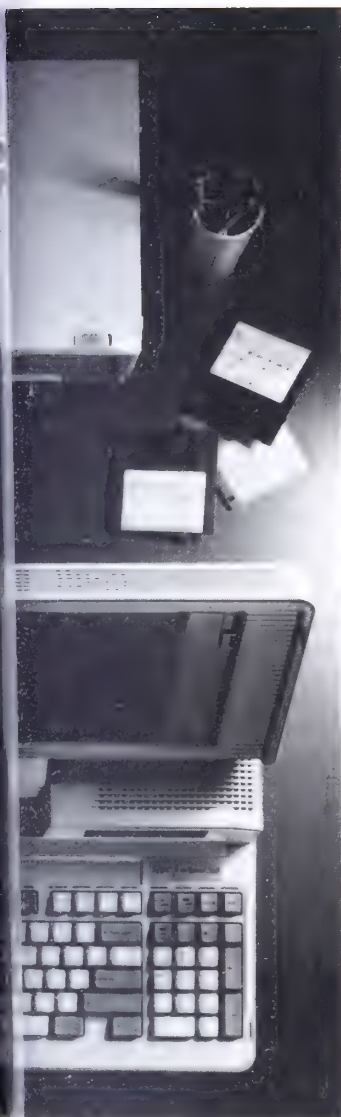
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NEC

WHAT STIRS THE SPIRIT MAKERS: VODKA, VODKA, VODKA

Premium-priced foreign brands are flooding into a hot market—and many will flop

Try pronouncing this: Wyborowa. If the name gets tangled on your tongue, House of Seagram, which is soon to repackage and relaunch this brand of Polish vodka in the U.S., doesn't mind. Seagram officials believe the unusual name will make their product stand out in the category of imported vodka, which will be awash in new entrants this year. Says Thomas K. McNerney, executive vice-president for marketing: "This is what we call a problem, slash, opportunity."

But cashing in on that opportunity may be as hard as speaking Polish. No fewer than 10 new premium-priced foreign vodkas, with such names as Icy, Elduris, and Denaka, are now on sale or will be by the end of the year. They should have a hard enough time slugging it out with each other for attention, but they will also be going up against two powerful established brands: Absolut, the category leader from Sweden, and Stolichnaya, the Russian favorite. "Many of the guys who are coming in now will make an honest attempt and fall flat on their ever-loving faces," says Brian Dunn, president of Park, Benziger & Co., which recently began to market Tarkhuna, a vodka-like spirit from Soviet Georgia faintly flavored with a local variety of grass.

WHITE SPIRIT. It's easy to see why distillers have such a taste for fancy vodka. While overall spirits consumption in the U.S. fell 2.6% last year, the eighth straight year of decline, according to BUSINESS WEEK's annual liquor survey, sales of imported vodka grew 22%, to 3.3 million cases. Brown-Forman Beverage Co., which will sink more than \$15 million into the national launch of its first white spirit, Icy vodka from Iceland, expects the market to grow to about 4.5 million cases by 1992.

Although most of this year's new-product activity centers on vodka, a number of companies are also spending heavily to introduce or relaunch brands in categories that haven't been too healthy in recent years. As Absolut has shown in the once-stagnant vodka market, a single product can buck the prevailing trend and turn in handsome prof-

its—if it's marketed right. "If you can make a successful brand, the fact that the category is declining is irrelevant," says William G. Pietersen, president of House of Seagram.

The only problem with a successful brand is that it attracts a lot of imitators, because liquor has always been a "me-too" business. After National Distillers Products Co. hit on a smashing success with its De-Kuyper Peachtree peach-flavored schnapps in 1985, many of its competitors quickly decided that sweet, low-alcohol spirits were the way to go, and began churning out dozens of new cordial flavors. That led to a surge in cordial sales, followed more recently by an ominous drop. In 1988, volume tumbled nearly 8% from the 1987 peak of 16.8 million cases. "It does look as if the sweet, fruity thing has run its course,"

says Nicolas Furlotte, editorial director of Jobson Beverage Alcohol Group, a trade magazine publisher. "The industry is now focusing more closely than ever on traditional goods, and really the premium products are where the action is."

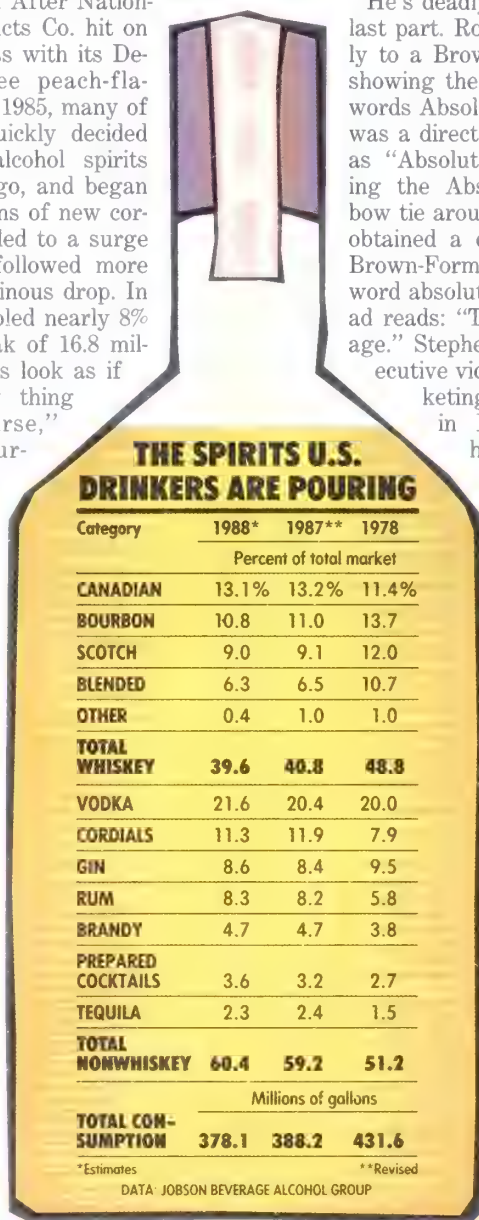
Premium vodka may be the place to be, but Absolut, which passed Stolichnaya as the leading import in 1985, will be a hard act to follow. Thanks to a brilliant ad campaign that uses clever renditions of the Absolut

bottle, Carillon Importers Ltd. has built a special cachet around its brand. Brown-Forman Chairman Michel P. Roux, who will spend about \$23 million advertising and promoting Absolut this year, believes that "there is room for people who don't try to imitate others. They have to create their own image and quality."

He's deadly serious about the last part. Roux didn't take kindly to a Brown-Forman trade showing the Icy bottle over to words Absolute Improvement. It was a direct takeoff of such ads as "Absolut Elegance," featuring the Absolut bottle with a bow tie around its neck. Carillon obtained a court order to stop Brown-Forman from using the word absolute. Now a new trade ad reads: "The dawn of the Icy age." Stephen B. Kauffman, executive vice-president for marketing at Brown-Forman

in Louisville, says he has a lot of respect for Absolut but insists: "We're not trying to copy them."

Liquor peddlers would mind copying Absolut's success, though. Responding to consumer demand for less potent and less fattening drinks, Seagram is trying to create a niche within the shrinking broad spirits group. It has just begun to sell a Canadian whisky called Mount Royal Light with one-third less alcohol and calories than regular blends. The



of product differs from the first generation of light whiskeys sold in the '70s, which were essentially 80-proof spirits diluted with water. Mount Royal distillery uses a special process to extract alcohol without changing the character and flavor of the drink, the company says. Pietersen is sure the concept will work. "You have light wines and light spirits. The only alcoholic beverages that don't have light are distilled spirits," he says. Seagram isn't the only company taking a fresh look at whiskey. Schenley Industries Inc. is relaunching Pinch Scotch as a superpremium brand aged 15 years instead of 12. In an attempt to give the product more of a quality image, Schenley has once again surrounded the oval-shaped Pinch bottle in a wire mesh, a feature that was reserved in the 1960s as a cost-saving measure. The company expects to spend about \$20 million to advertise Pinch in the next three years. Predicts Alexander Berk, president of Schenley: "Scotch will come back because it is too prestigious to be a drink not to."

**'Scotch will come back
because it is
too prestigious
a drink not to'**

When Brown-Forman's conservative Daniel Distillery is coming out with its first new product in more than 100 years, a premium sour mash whiskey called Gentleman Jack, retailing for about \$20 a bottle. Because the product requires special hand-finishing techniques, it cannot be mass-produced and will be available in limited quantities in at least 10 major U.S. cities.

Liquor industry consolidation has put many of the leading distillers in the hands of global giants such as Britain's Diageo and Metropolitan PLC and Guinness and that means they now have the financial muscle to back up these newly created brands. They can also afford to take risks, even if some products won't make it. "As companies were going through reorganizations, things were financially driven by financial people. Now we're seeing an opportunity for the marketing people to respond more effectively to consumer demand," says William G. Slone, publisher of *Beverage Magazine*, a trade magazine. As distillers have learned, good marketing is key, whether they're selling whiskey, schnapps, or a high-sounding Polish vodka produced "Vee-ba-rova."

By Amy Dunkin in New York

LIQUOR INDUSTRY SCOREBOARD

RANK				BRAND	TYPE	MARKETER	SALES THOUSANDS OF CASES			5-YEAR GROWTH RATE
	'88	'87	'86				1988	1987	1986	
1	1	1		BACARDI	Rum	Bacardi	7350	7330	7120	0.2%
2	2	2		SMIRNOFF	Vodka	Heublein	5900	5510	6100	-0.7
3	3	3		SEAGRAM'S 7-CROWN	Blended	Seagram	3840	3900	3950	-4.5
4	4	4		CANADIAN MIST	Canadian	Brown-Forman	3370	3410	3560	0.0
5	7	5		POPOV	Vodka	Heublein	3250	3060	3410	1.6
6	5	7		JIM BEAM	Bourbon	Jim Beam	3200	3250	3240	-0.3
7	8	8		JACK DANIEL	Tennessee	Brown-Forman	3180	3030	2960	0.2
8	9	9		SEAGRAM'S GIN	Gin	Seagram	3150	2970	2920	3.9
9	6	6		DEKUYPER CORDIALS	Cordial	Jim Beam	2550	3100	3370	-13.0**
10	10	10		CANADIAN CLUB	Canadian	Hiram Walker	2350	2300	2250	-1.8
11	11	11		SEAGRAM'S VO	Canadian	Seagram	2200	2230	2250	-5.5
12	12	12		DEWAR'S	Scotch	Schenley	2100	2070	2160	-0.9
13	13	13		WINDSOR SUPREME	Canadian	Jim Beam	1900	1920	1990	-2.2
14	14	16		E & J	Brandy	E & J Gallo	1850	1790	1670	9.1
15	17	14		GORDON'S GIN	Gin	Schenley	1740	1650	1750	-3.9
16	15	15		BLACK VELVET	Canadian	Heublein	1730	1690	1740	-1.9
17	16	18		HIRAM WALKER	Cordial	Hiram Walker	1690	1680	1650	7.5
18	18	17		GORDON'S VODKA	Vodka	Schenley	1650	1610	1650	-1.7
19	20	20		KAHLUA	Cordial	Maidstone	1550	1580	1470	2.4
20	23	26		JOSE CUERVO	Tequila	Heublein	1500	1250	1150	12.0
21	19	19		KAMCHATKA	Vodka	Jim Beam	1490	1600	1570	-3.1
22	32	41		ABSOLUT	Vodka	Carillon	1410	1110	900	25.1**
23	24	23		CROWN ROYAL	Canadian	Seagram	1310	1220	1200	5.0
24	22	22		J & B	Scotch	Paddington	1260	1320	1300	-5.3
25	29	30		SOUTHERN COMFORT	Cordial	Brown-Forman	1190	1150	1100	3.5
26	28	31		TANQUERAY	Gin	Schiffelin/Somerset	1180	1150	1100	4.9
27	34	33		SKOL	Vodka	Glenmore	1170	1070	1030	7.9
28	30	29		GILBEY'S VODKA	Vodka	Jim Beam	1160	1130	1130	-2.3
29	25	21		EARLY TIMES	Bourbon	Brown-Forman	1150	1200	1330	-4.8
30	27	24		CHRISTIAN BROTHERS	Brandy	Christian Brothers	1150	1190	1160	-2.2
31	26	27		GILBEY'S GIN	Gin	Jim Beam	1130	1190	1150	-8.7
32	33	28		KESSLER	Blended	Seagram	1090	1090	1140	-4.6
33	31	25		JOHNNIE WALKER RED	Scotch	Schiffelin/Somerset	1060	1120	1150	-1.2
34	36	32		LORD CALVERT	Canadian	Seagram	1030	1020	1070	-0.9
35	40	39		ANCIENT AGE	Bourbon	Age International	960	900	930	1.9
36	39	42		BAILEY'S	Cordial	Paddington	950	920	890	4.8
37	37	37		BEEFEATER	Gin	Buckingham Wile	930	950	980	-4.5
38	45	49		STOLICHNAYA	Vodka	Monsieur Henri	900	790	740	14.7
39	41	44		WOLFSCHMIDT	Vodka	Seagram	890	890	870	-1.4
40	35	36		TEN HIGH	Bourbon	Hiram Walker	880	1030	1000	-4.0
41	21	40		GOLDEN SPIRITS	Prep Cktl	Seagram	850	1350	910	-3.2**
42	38	43		CLUB COCKTAILS	Prep Cktl	Heublein	840	930	880	-2.2**
43	43	35		FLEISCHMANN'S VODKA	Vodka	Glenmore	800	850	1000	-4.4
44	42	34		ARROW CORDIALS	Cordial	Heublein	750	850	1000	-8.6
45	44	38		LEROUX CORDIALS	Cordial	Seagram	750	810	950	-1.3
46	47	46		CHIVAS REGAL	Scotch	Seagram	740	750	750	-2.2
47	48	47		HENNESSY	Cognac	Schiffelin/Somerset	740	730	750	3.5
48	46	45		CUTTY SARK	Scotch	Buckingham Wile	730	760	770	-7.0
49	50	50		RON CASTILLO	Rum	Bacardi	720	720	740	-3.2
50	56	57		BARTON VODKA	Vodka	Barton Brands, Ltd.	660	600	610	1.0
51	58	56		MCCORMICK VODKA	Vodka	McCormick	630	590	610	13.7
52	61	61		OLD CROW	Bourbon	Jim Beam	620	520	480	-5.6
53	51	54		FLEISCHMANN'S GIN	Gin	Glenmore	610	700	680	-2.0
54	52	51		CANADIAN LTD	Canadian	Glenmore	600	670	720	-0.8
55	49	48		OLD SMUGGLER	Scotch	W. A. Taylor	600	730	750	-3.7
56	60	59		EVAN WILLIAMS	Bourbon	Heaven Hill	600	580	590	-1.7
57	53	58		SCORESBY	Scotch	Glenmore	600	630	590	8.4
58	57	53		RELSKA	Vodka	Heublein	590	600	690	-2.8
59	54	52		CALVERT EXTRA	Blended	Seagram	570	620	710	-8.9
60	59	60		COURVOISIER	Cognac	W.A. Taylor	550	580	540	6.1

*Revised **1986-88 DATA: ESTIMATES OF RETAIL SALES, ROUNDED TO NEAREST 10,000 MIXED CASES, FROM JOHNSON BEVERAGE ALCOHOL GROUP

JUST WHEN THE OZONE WAR LOOKED WINNABLE . . .

New data show that curbing CFCs alone won't do the job

It looked as if an unusual global alliance was about to lick one of the world's worst environmental problems. Three dozen nations signed the unprecedented Montreal Protocol in 1987, promising to cut production of chlorofluorocarbons (CFCs), the chemicals that are eating at the ozone layer, in half by 1998. Then, in May, at a meeting in Helsinki, the treaty signers informally pledged to ban CFCs, which are found in \$135 billion worth of U.S. products, by the year 2000.

But it also became clear at Helsinki that even those reductions are unlikely to stave off widespread destruction of ozone, which shields the earth from dangerous ultraviolet radiation. The breakdown of the ozone layer is escalating—and scientists are convinced that compounds not covered by the treaty are also major culprits. What's more, substitutes for CFCs are risky, too.

The news is pushing policymakers to consider even more draconian actions. But any new restrictions on ozone-depleting chemicals could be more disruptive to chemical makers and users of CFCs than the Montreal Protocol. "The bad news is that it's going to be much harder to fix the ozone layer than we thought," says David P. Doniger, head of the Natural Resources Defense Council's ozone protection project.

DESTRUCTIVE FORCE. The threats to the protective screen are everywhere. Chlorine-laden CFCs are used in everything from coolants for refrigerators and air conditioners to foam insulation and cleaners for electronic parts. Once they are released into the stratosphere, ultraviolet light breaks them down, and their chlorine attacks ozone.

Scientists continue to find alarming evidence of CFCs' destructive power.

During the winter of 1988, the size of the hole in the ozone layer over the South Pole increased dramatically. And a just-completed expedition to the North Pole found that it "is primed for the same kind of event," says Ralph J. Cicerone, director of atmospheric chemistry at the National Center for Atmospheric Research in Boulder, Colo.

To make matters worse, researchers are just beginning to grasp the dangers

three parts per billion today to 14 parts per billion by 2100 (chart). Even the electronics industry agrees that a freeze of the 600 million pounds of methyl chloroform it uses annually may be warranted.

But placing any new limits will be difficult. It took years to get just one-fifth of the world's nations to agree to the limited Montreal treaty. And banning methyl chloroform could backfire. The electronics industry uses it as a substitute for CFC113, a compound with a greater ozone-depleting potential. Instead, it's most important "to get 100% compliance with the Montreal Protocol," says Paul A. Cammer, president of the Halogenated Solvents Industry Alliance.

The situation is complicated by HCFCs, the hydrogen-containing compounds the Du Pont Co., the world's largest maker of CFCs, and other chemical companies are counting on as substitutes. While most HCFCs have, at most, 5% of the

ozone-depleting potential of CFCs, EPA assessments show that if HCFC use grows too fast, it will hinder efforts to cut chlorine levels set by the Montreal pact.

Chemical producers oppose any mandatory limits on HCFCs. The U.S. is unlikely to accomplish the quick substitution of CFCs without using more HCFCs, says Marilyn Montgomery, general manager of Genetron, a unit of Allied Signal Inc. Chemical makers argue that improvements in CFC handling, such as preventing leaks in air conditioning

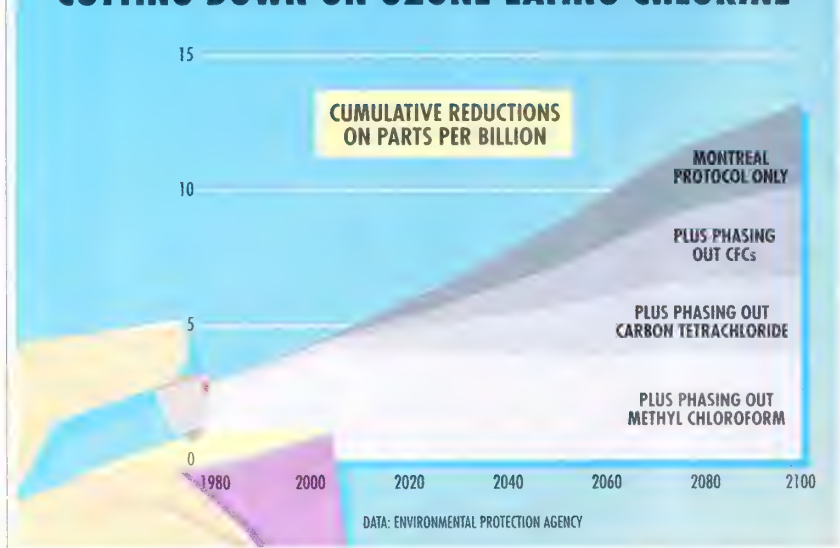
and recycling, will help keep emissions down.

STAGGERING COSTS. In August, policymakers will gather again to consider these new threats to the ozone layer. The West Germans have proposed a phaseout of carbon tetrachloride and methyl chloroform, and the U.S. may move that way. Says Eileen B. Clausen, director of the EPA's office of atmospheric and indoor air programs: "It's fairly clear we will do something about these two chemicals."

If the industrialized nations agree on a more stringent regulatory scheme to preserve the ozone, the costs to business will be staggering. But government leaders may decide that doing anything less would be even more costly.

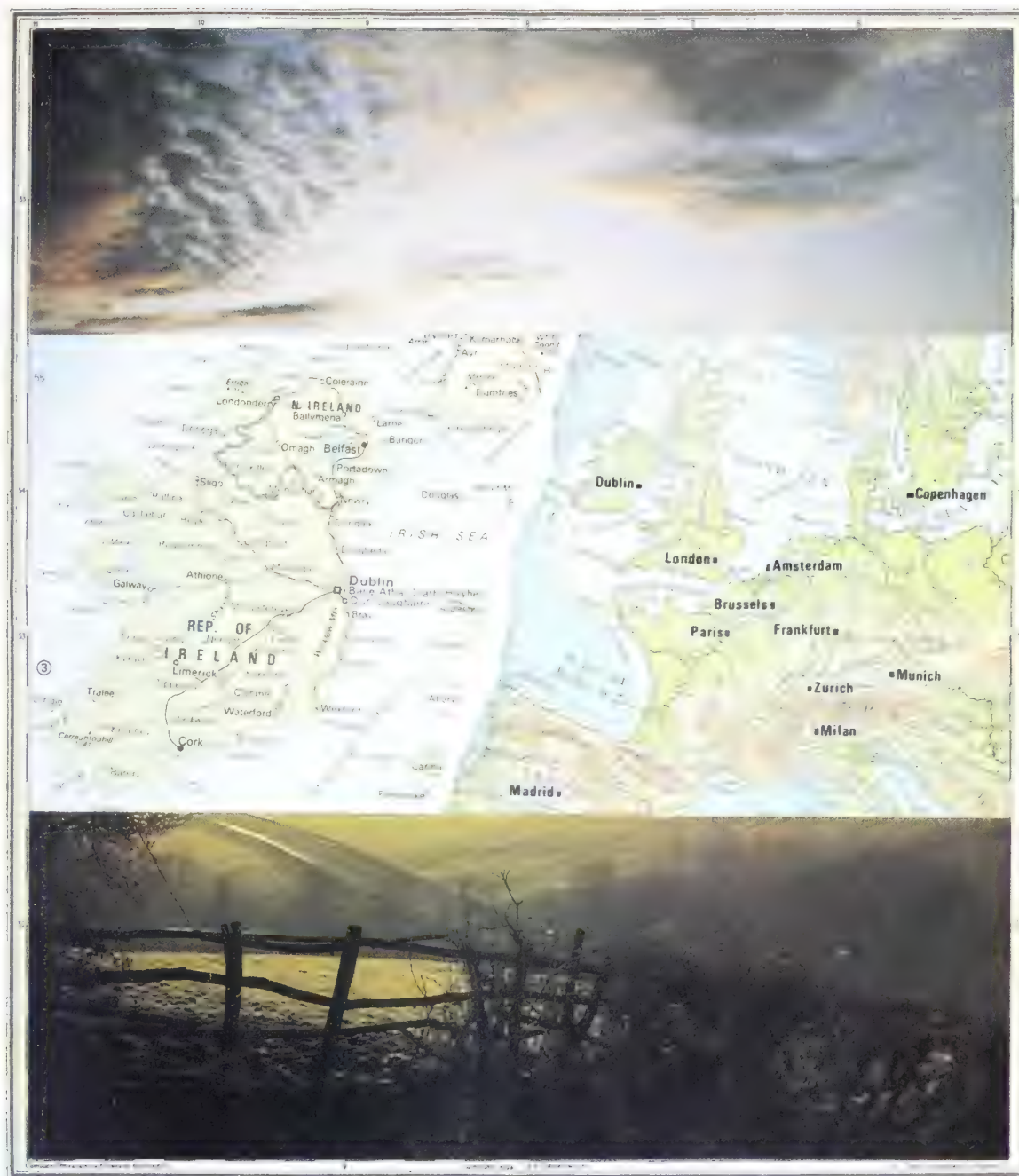
By Vicky Cahan in Washington

CUTTING DOWN ON OZONE-EATING CHLORINE



of two other chlorine-based chemicals: methyl chloroform, used as a degreasing agent for metals and electronics-equipment parts, and carbon tetrachloride, which is used to make CFCs as well as pesticides and dyes. By May, the Environmental Protection Agency concluded that over the next century, methyl chloroform will account for 35% of the buildup of chlorine in the atmosphere. Unless the substances are controlled, it will be "extremely difficult" to lower chlorine levels and repair the ozone hole, says Robert T. Watson, chief atmospheric chemistry researcher at the National Aeronautics & Space Administration.

Indeed, EPA data show that without tougher limits than those allowed by the Montreal agreement, chlorine levels in the stratosphere will leap from under



A CHANCE MEETING ON AN IRISH TRAIN

HE WAS A FELLOW AMERICAN. I KNEW HE WAS AMERICAN BECAUSE HE ASKED FOR MORE ICE.

"IF I PUT IN ANY MORE ICE," SCOLDED THE STEWARD, "THERE'LL BE NO ROOM FOR THE WHISKEY."

Ireland has consistently been the most profitable location in Europe for US business – and by 1992 Europe will be the largest single market in the world.

"TERRIBLE COUNTRY," REMARKED MY COMPATRIOT. I WAS LOATH TO ANSWER HIM LEST HE DISCOVER FROM MY ACCENT THAT I WAS MORE SOUTH OF SAN FRANCISCO THAN SOUTH OF DUBLIN.

"MMM," I MURMURED, ENIGMATICALLY. BUT LONELINESS MUST HAVE FINE-TUNED HIS EAR BECAUSE HE POUNCED AT ONCE.

"YOU'RE AMERICAN!" HE CRIED MUCH AS MOSES MIGHT HAVE GREETED THE GENTLEMAN WHO DELIVERED THE TABLETS OF STONE

"YES," I SIGHED.

"VACATION?" HE ASKED.

"NO, I LIVE HERE."

"YOU LIVE HERE?" HE WAS AGHAST. "HOW CAN YOU STAND IT. ALL THAT RAIN."

Over 900 overseas companies have set up a manufacturing base in Ireland – the ideal location to serve the European market.

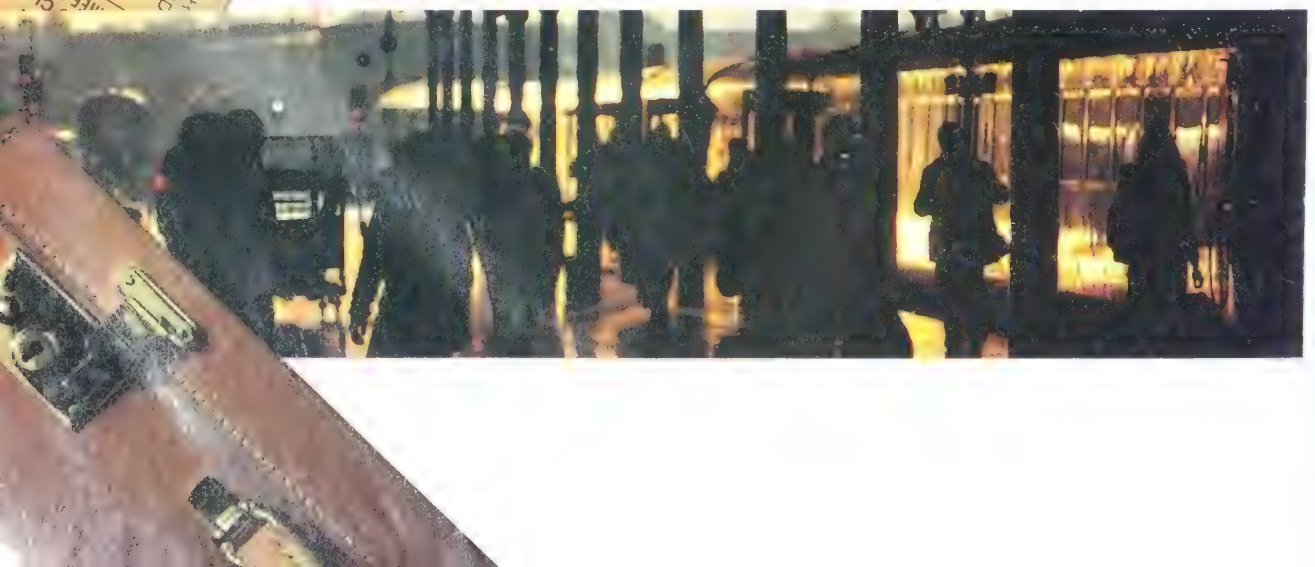
IT HAD, INDEED, BEEN RAINING SINCE WE BOARDED THE TRAIN BUT, PRIOR TO TODAY, THE MONTH HAD BEEN DRY AND SUNNY. TO TELL THE TRUTH, I WAS GLAD OF A SPOT OF RAIN. IT MIGHT RAISE A FEW TROUT.

"YOU A WRITER?" MY COMPANION PROBED SUSPICIOUSLY. WICHITA, I SURMISED.

"NO, SOFTWARE."

"NO KIDDING," SAID MR WICHITA WHO CLEARLY BELIEVED I WAS. KIDDING, THAT IS.

ACTUALLY, I HEAD UP THE EUROPEAN SOFTWARE DIVISION OF ONE OF THE US'S BIGGEST ELECTRONICS CORPORATIONS, BUT I DIDN'T WANT TO GO INTO THAT.



"ELECTRONICS? IN IRELAND?" SCOFFED MY FRIEND AS THOUGH I'D SUGGESTED THAT I WAS CATTLE-RANCHING IN MANHATTAN.

"WE'RE IN IRELAND," I TOLD HIM A LITTLE COLDLY, "BECAUSE THIS IS EUROPE — WHICH IS PRECISELY WHERE AN ELECTRONICS COMPANY SHOULD BE."

AT THAT MOMENT, JOHN SULLIVAN HOVE INTO VIEW. I FELT RELIEF AND TREPIDATION IN EQUAL MEASURE. JOHN'S ELDEST SON, A VERY HOT YOUNG SOFTWARE DESIGNER, WORKS FOR THE COMPANY. UNFORTUNATELY, JOHN HAS A SECOND SON SOON TO BE SIMILARLY QUALIFIED, AND HE'S ANXIOUS TO PLACE HIM. IT'S VERY HARD TO SAY 'NO' TO JOHN. FOR ONE THING, HE'S SIX-FOOT-FOUR. FOR ANOTHER, HE OWNS OUR LOCAL RESTAURANT. ON MY LAST TWO VISITS, HE HAS GIVEN BY FAR THE LARGER LOBSTER TO MY WIFE.

"SURE YOU NEED FATTENING UP," HE TOLD HER, THEREBY GAINING A FRIEND FOR LIFE.

"I MEAN, I COULD UNDERSTAND THE UK."

"WHAT?" I'D FORGOTTEN ABOUT MR WICHITA.

"HE COULD UNDERSTAND THE UK," OFFERED JOHN HELPFULLY, STRETCHING OUT HIS HAND AND INTRODUCING HIMSELF TO MR WICHITA.

"HANK ROTH," SAID MR WICHITA, WINCING IN JOHN'S HANDSHAKE.

"GO ON, HANK," ENCOURAGED JOHN, "YOU WERE SAYING YOU COULD UNDERSTAND THE UK."

"IRELAND," I SAID PATIENTLY, "HAS HALF THE INFLATION OF THE UK AND EVEN MORE IMPORTANT, IT'S GOT THE PEOPLE WE NEED."

"EXACTLY!" BEAMED JOHN.

"SO MANY," I FAIRLY SPAT, "THAT WE RECRUITED ALL THE KEY PERSONNEL WE NEEDED ALMOST IMMEDIATELY. ALL WE NEEDED," I ADDED FOR GOOD MEASURE.

Half the population of Ireland is under 28 — in an ageing Europe faced with shortages of skilled labour this gives the Irish a significant competitive advantage.

Inflation in Ireland is one of the lowest in the European community and less than half that of the UK.



INFLATION RATE 1988	
Ireland	2.1%
U.K.	5.75%
Portugal	9.0%
Spain	4.8%
Denmark	4.6%
Germany	1.2%
Italy	4.9%
EC Average	3.75%

Source: Economist Intelligence Unit

"BUT," INTERJECTED JOHN SADLY, "THINGS ARE GOING VERY BADLY FOR THE COMPANY NOW."

"WHAT?" I EXPLODED.

"SURE IF YOU WERE GOING WELL, WOULDN'T YOU BE EXPANDING — TAKING ON MORE STAFF. AM I RIGHT, HANK?"

More than 250 electronic companies have a manufacturing base in Ireland — including Amdahl, Analog, Apple, DEC, Ericsson, General Electric, Wang, Westinghouse and Zenith.

"GUESS SO," SAID HANK, WHOSE DRINK HAD NOW ARRIVED CONTAINING ENOUGH ICE TO CONSTITUTE A SHIPPING HAZARD.

"WHO ASKED YOU?" I ROUNDED ON THE INNOCENT HANK.

"DON'T MIND HIM," JOHN SOOTHED MY VISITING COMPATRIOT. "HE'S OUT OF SORTS BECAUSE HE HASN'T CAUGHT A FISH ALL SEASON."

"WHAT DID YOU SAY?" I HISSED.

"ME?" ASKED JOHN, ALL BLAND INNOCENCE.

THERE ARE NO DEPTHS TO WHICH JOHN WILL NOT SINK TO OVERRUN MY COMPANY WITH HIS PROGENY. HIS SEEMINGLY INNOCENT ALLUSION TO FISH WAS, IN FACT, A BRAZEN ATTEMPT TO BLACKMAIL ME. YOU SEE, ON OUR LAST FISHING EXPEDITION, I HAD FOOLISHLY ALLOWED JOHN TO TALK ME INTO PASSING OFF ONE OF HIS CATCH AS MY OWN.

Maximum corporation profit tax in Ireland is 10% until the year 2000 — a clear indication of consistent and long-term Government support for business.

MY WIFE'S CONGRATULATIONS WERE STILL RINGING IN MY EARS WHEN JOHN REMINDED ME THAT ONE GOOD TURN DESERVED ANOTHER.

"BLACKMAILER," I SAID.

"YERRA WILL YOU WHISHT," SAID JOHN WHO, OCCASIONALLY, TO AMUSE HIMSELF TALKS LIKE A CHARACTER FROM "THE QUIET MAN."

"ALL I WANT," HE SAID, ADDRESSING HIS REMARKS TO HANK (WHO WAS BEGINNING TO LOOK LIKE A MAN WHO HAD INADVERTANTLY STRAYED INTO A HOME FOR THE BEWILDERED), "ALL I WANT IS MY FAMILY AROUND ME. IS THAT TOO MUCH TO ASK?"

"NO, SIR," SAID HANK UNEASILY.





I SHOULD POINT OUT THAT JOHN'S SECOND SON JOE WILL SOON BE EVEN MORE HIGHLY QUALIFIED THAN HIS BROTHER. "JOE COULD GET A JOB IN ANY OF THE ELECTRONICS COMPANIES IN IRELAND, FOR GOD'S SAKE," I REMINDED JOHN, "THERE ARE HUNDREDS OF THEM — WHY PICK ON ME?"

"BECAUSE," SAID JOHN, "YOU'RE THE ONLY ONE THAT'S RIGHT HERE IN MY HOME TOWN. AND BESIDES," HE ADDED DISARMINGLY, "YOU'RE MY BEST FRIEND."

"FRIEND? YOU BEAT ME AT GOLF, YOU FLIRT WITH MY WIFE, YOU BORROW MY COPY OF ULYSSES AND DON'T RETURN IT..."

"SURE WHAT WOULD I BORROW YOUR COPY OF ULYSSES FOR?" ASKED JOHN, ALL SWEET REASON, "ONLY AMERICANS READ ULYSSES. AM I RIGHT HANK?"

"RIGHT AS RAIN," REPLIED HANK, WHO'D GROWN WITTY ON AN OVER-INDULGENCE OF ICE. I LAUGHED A LITTLE WILDLY.

"HASN'T HE A GREAT HEART THOUGH," REMARKED JOHN TO HANK, "HIS COMPANY GOING TO THE WALL AND HE CAN STILL LAUGH."

"GOING TO THE WALL?" I FAIRLY YELLED, "WE'RE DOUBLING OUR PLANT NEXT YEAR. DOUBLING IT!"

"NEXT YEAR? THERE'S SERENDIPITY FOR YOU," CROONED JOHN, "JOE WILL JUST BE QUALIFIED."

I FELT AS THOUGH I'D BEEN ARM WRESTLING WITH AN OCTOPUS. EXHAUSTED I COULD ONLY MANAGE A WEAK, "WELL, I MIGHT JUST SEE HIM ... NO PROMISES MIND."

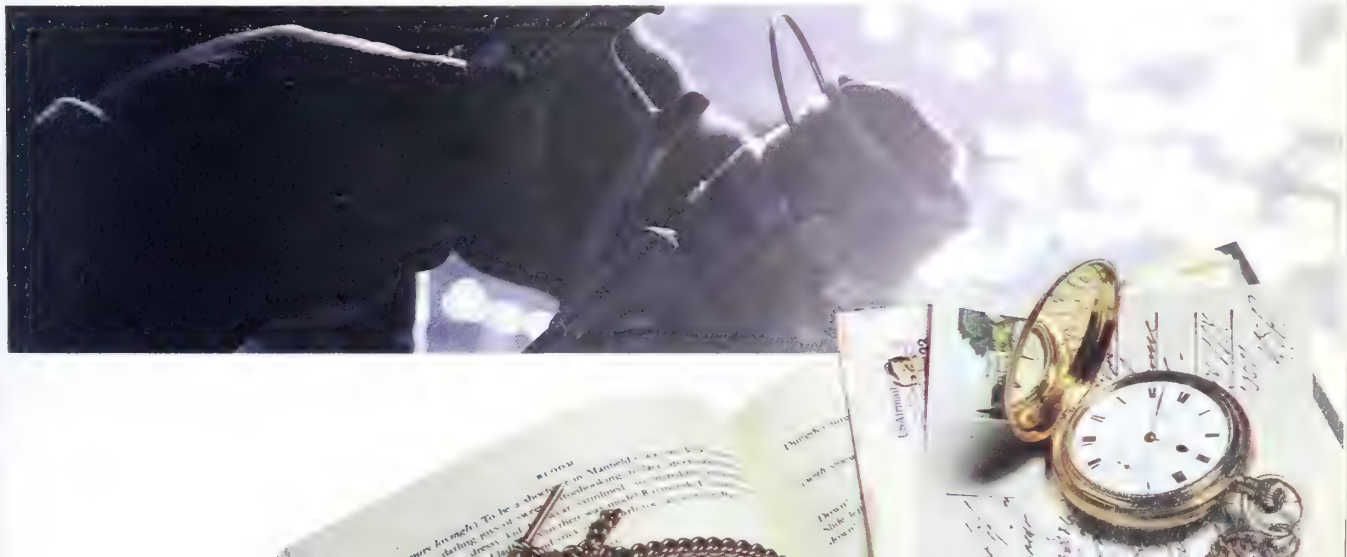
"THAT'S SETTLED THEN," SAID JOHN COMFORTABLY, "COME UP TO THE RESTAURANT TONIGHT. I'VE A LOBSTER EARMARKED FOR YOU THAT'S AS BIG AS THE MARKETS OF THE US AND JAPAN COMBINED."

"BUT NOT QUITE AS BIG AS THE EUROPEAN MARKET," I SUGGESTED DRILY.

"AH NO," SAID JOHN. "I'M SAVING THAT ONE FOR YOUR WIFE."

Irish engineering and computer-related graduates will increase by 33% between now and 1991. Availability of these key skills is one reason why Ireland is the first choice for US electronic companies.

Dublin's new international Financial Services Centre has already attracted over 60 leading financial institutions — a strong vote of confidence in the Irish economy.



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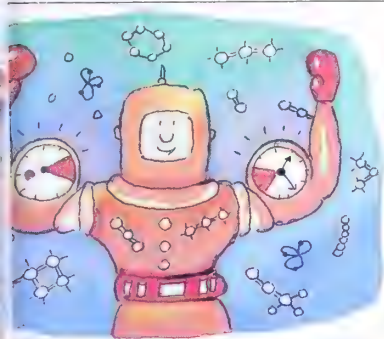
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Developments to Watch

ED BY EMILY T. SMITH

KING SOME UNCERTAINTY OF TOXIC-WASTE CLEANUPS



When cleanup teams arrive at a hazardous waste site, they seldom know what noxious chemicals they will confront. That makes it difficult to determine what kind of protective clothing to wear and how long that clothing will

de protection. Now, Arthur D. Little Inc. is marketing a kit that measures how long it takes for unknown chemicals to penetrate protective clothing.

The test is done by placing the unknown chemicals into a then stretching a covering of the material used in the protective clothing over the cup. The cup is weighed and turned upside down. The cup is reweighed periodically to determine whether the chemical has seeped through the suit material and begun to evaporate. Once evaporation begins, the time at which the chemicals are permeating the suit material is calculated. Breakthrough time and permeation rates are usually be determined within 30 minutes. The reusable kits cost \$2,795 each.

THERE'S NO MAYBE ABOUT FUZZY-LOGIC ADVANCE

The yes/no, on/off nature of digital logic isn't always well suited for making decisions in the real world, where uncertainties and ambiguities abound. There, "maybe" can be as useful as you can get. Computer scientists have concocted a technique dubbed fuzzy logic to deal with imprecise information. The concept has never caught on—largely because purists contend that it leads to unreliable systems.

That was before Hiroyuki Watanabe, a former fuzzy-logic expert at AT&T Bell Laboratories and now an assistant professor of computer science at the University of North Carolina at Chapel Hill, came up with a microprocessor-like chip that has an all-digital "architecture" yet can execute fuzzy logic inferences. In fact, its 680,000 transistors can whip up 580,000 "if-then" decisions per second. That's 100 times faster than the next best fuzzy-logic chip—designed in Japan, where fuzzy logic has a big following.

Watanabe's fuzzy chip was produced by the Microelectronics Research Center of North Carolina, a nonprofit research consortium in Research Triangle Park, N.C., which helped develop the chip. Its first application may come as the "brains" in the mobile robot that Oak Ridge National Laboratory is developing for radioactively hot areas inside nuclear power plants.

INDUSTRIAL R&D SPENDING: WORRY SHOWING FOR 1989?

With all the concern over the competitiveness of U.S. industry, you might think companies would be stepping up research and development spending. But that doesn't appear to be the case. Industry's overall funding of R&D is

slowing this year, according to a recent study by the National Science Foundation.

The NSF now projects that total spending in 1989 won't even keep pace with inflation, rising a meager 2% over the \$58.1 billion that the agency figures U.S. companies spent last year. The new 1989 projection—\$61.4 billion—is down from an earlier forecast of \$62.6 billion.

The 92 companies surveyed account for half of all industry-funded R&D. Fully a third of the respondents reported that their R&D budgets were frozen or falling. Typically, they cited disappointing sales or profits, plus management emphasis on reducing costs, as reasons for the lack of growth. The NSF specifically asked whether the October, 1987, stock market crash had an impact on R&D spending. The answer was no.

A SOIL FUNGUS COULD PUT YOUR MOTHBALLS IN MOTHBALLS

It's summer, time to pack those wool clothes in mothballs to prevent insects from eating holes in your favorite sweater. You may soon, however, be able to forget that annoying annual exercise.

Scientists at the U.S. Agriculture Dept. have developed a new way to protect wool clothes from insects without using smelly mothballs or storing clothes away. They're using an extract derived from a soil fungus. Called Avermectin, the substance was originally developed by Merck & Co. to prevent internal parasites in animals. But the Agriculture scientists have found that fabric treated with a solution of the chemical repels webbing clothes moths, the furniture carpet beetle, and the black carpet beetle—the three worst enemies of wool fabric. Mothballs protect fabric for about a year, but Avermectin-treated cloth lost little of its protective value even after five years. Roy E. Bry, an Agriculture entomologist based in Savannah, Ga., says the protectant could probably be developed as an aerosol spray.

AEROSOL CANS THAT RUN ON COMPRESSED-AIR POWER

When the U.S. banned chlorofluorocarbons (CFCs) for use in aerosol cans a decade ago, manufacturers switched to hydrocarbons, including butane and propane. But those materials increased the possibility of explosion. Compressed air seemed an ideal alternative, but it runs out before all of the product is sprayed.

Now, Werding Technologies, based in Geneva, says it has come up with a new valve system that solves the problem. Products such as hair spray are placed in a flexible pouch, then compressed air is injected into the can surrounding the pouch. As the pressure drops, the valve automatically modifies the flow of hair spray to ensure a constant spray pattern.

Werding is targeting Europe and Japan, where CFCs are only now being phased out for aerosol use. Eventually it hopes to crack the North American market. That will pit it against Exxel Container, a Somerset (N.J.) company that markets a rubber sleeve that squeezes material out of a prefilled pouch.





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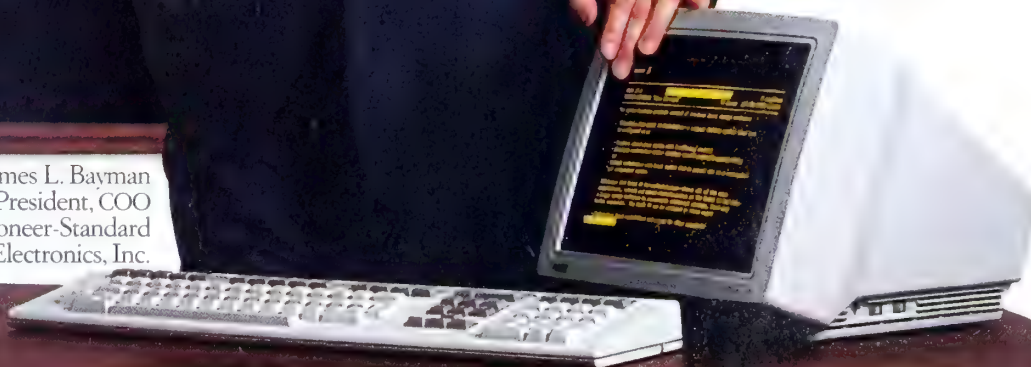
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FEWER GUNS COULD MEAN A WHOLE LOT MORE BUTTER

Forecasts show that big defense cuts would only be a temporary setback for the economy

It's premature, to be sure. Politically, it would be an uphill battle. But it's no longer outright folly to contemplate a time in the not-too-distant future when the U.S. could spend a good deal less on defense. While the Pentagon has tightened its belt since the Reagan arms buildup in the early 1980s, further progress on both strategic and conventional arms control negotiations with the Soviet Union could pave the way for much deeper cuts. By eliminating missiles and

might enhance the productivity of the work force. So spending on guns rather than butter carries hidden costs.

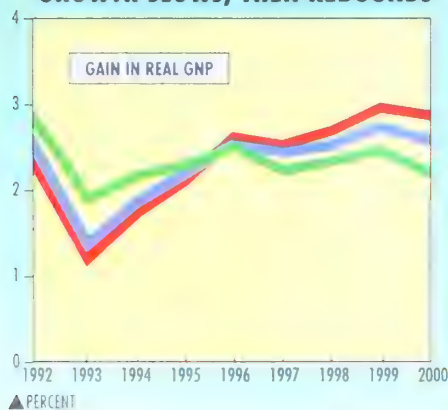
BUSINESS WEEK asked DRI/McGraw Hill, the economic consulting and forecasting firm, to simulate the effect that sustained cuts in the defense budget during the 1990s would have on the economy. The cuts would have to be phased in over a period of years to ease the shock to industries and regions heavily dependent on military spending.

vive, growing at a modest 1% to 2% through the end of the decade. At the same time, says Brown, the Defense Dept. will be entering a new procurement cycle, during which it will contract for more advanced generations of weapons based on research and development now taking place.

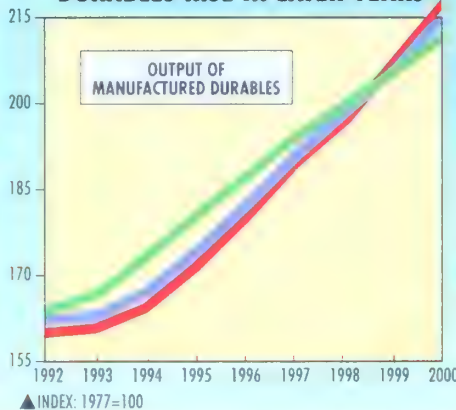
And Brown isn't alone in believing that cuts will be hard to come by. The massive Reagan buildup "locked in" increases of 2% to 5% in real terms for

HOW THE ECONOMY WOULD BE AFFECTED BY DEFENSE CUTS

GROWTH SLOWS, THEN REBOUNDS



DURABLES RISE IN LATER YEARS



THE BUDGET GOES INTO SURPLUS



demobilizing troops, America could reap a sizable peace dividend by the year 2000. Short-term interest rates could fall to less than 5%, housing could surge, the federal budget would move into surplus, and growth would accelerate.

The economic consequences of deep defense cuts would be long-term gain—with some near-term pain. That's because at 26% of the government's total budget, defense outlays pack a wallop. The 1981-85 buildup alone created more than 7 million defense-related jobs.

But by the same token, military spending of close to \$300 billion a year is occurring at a time when the federal government's overall budget is still \$150 billion in the red. Defense spending diverts precious resources from the private economy, as well as from other forms of government spending that

DRI's results show that industrial output, capital spending, and gross national product all grow at a slower rate in the early years—though at no time do they experience outright declines.

NEW CYCLE. Later, though, as a shrinking deficit pushes interest rates lower and keeps inflation tame, capital spending rises, production revives, and overall growth rates accelerate (charts). "Those are some pretty impressive impacts over the long run," says George F. Brown Jr., executive vice-president at DRI/McGraw-Hill. "It would be wonderful if the world were that nice as to accommodate such deep cuts in spending."

DRI's base forecast assumes real cuts in defense averaging 2.3% a year for fiscal years 1989-91. But beginning in fiscal 1992, DRI economists figure that budget allocations in real terms will re-

operations and management part of the defense budget, says Douglas Lee, president at Washington Analysis Co. And Gordon Adams, director of Defense Budget Project, a nonprofit group in Washington, notes that Defense Secretary Richard B. Cheney has eschewed cutting or delaying any of the 15 top major new hardware programs that are the "real budget busters."

Still, budget realities and general arms control could change all that. Two alternate scenarios were plugged into DRI's long-term model, and the results were compared with the original case. In the first instance, "moderate" cuts of 2% a year, beginning in fiscal 1992 and continuing to the year 2000, were introduced. In the second example, "big" cuts of 4% a year, for the same time period, were adopted. Although these numbers

seem small, even the "moderate" cuts accumulate to a sizable \$182 billion over the period, while the 4% formula amounts to a cumulative contraction of \$17 billion. With those deeper cuts, the defense budget, instead of totaling \$600 billion, as DRI expects, would only reach \$46 billion by the year 2000.

LAGGERING. Although the payoff from these savings isn't immediate, in later years, it becomes enormous. Growth, slowing markedly in response to the tight fiscal restraint implied, starts to rebound in mid-decade. By the year 2000, gross national product in the "moderate" case is growing 0.4% faster than the base case, while sustained cuts of a year yield a growth rate 0.7% faster than in the base case. Because of the slower growth in the earlier years, however, the absolute level of GNP is about the same in all three cases by the end of the decade.

Other gains are immediate. The housing industry from the outset shows greater strength than in the base case. The budget deficit starts to shrink,

glected by the federal dollar, could produce long-term payoffs above and beyond the savings that budget-cutting might yield.

Furthermore, since defense spending is so production-intensive, the model initially yields a sharp slowdown in manufactured-goods output, DRI's Caton notes. But it's unlikely that this process would continue unchecked. With severe dislocations likely to take place in certain industries and regions, the government might introduce financial assistance and retraining to cushion the blow.

Decentralized planning at the factory level would be essential to make the shift from "military Keynesianism" as painless as possible, says Seymour Melman of Columbia University, author of several books on defense and the economy. Indeed, strategies to ease the pain of cutbacks might be helpful right now. Even without arms control, small cuts, delays, and cancellations are inevitable. To help reduce the fiscal 1990 budget by 1% in real terms, Defense Secretary Cheney proposed a batch of such moves,

economies at the time of the layoffs makes a difference. "It all depends on context," says Adams. If the local economy and the national economy are in recession, there's little opportunity for job absorption. But relatively healthy economies can weather small cutbacks, and in regions with skilled-worker shortages, laid-off workers might have little trouble finding new employment.

'SUPERCHARGING EFFECT.' Finally, the simulations probably understate the benefits that could be gained from defense cutbacks, because the model doesn't draw a qualitative difference between military spending and nonmilitary spending. Not everyone agrees that there actually is a difference, but some critics charge that the military-industrial complex that Dwight D. Eisenhower warned of decades ago has robbed the economy of critical resources that might have been used in more productive and efficient ways.

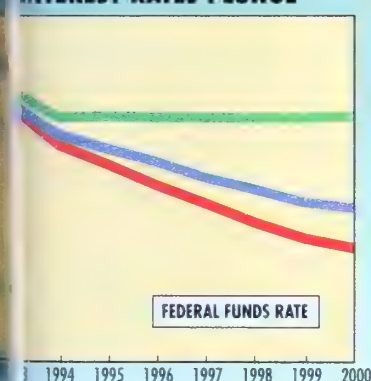
The Pentagon budget has decreased as a share of GNP in recent years, to its current 6%, but that figure may mask a

BASE CASE ASSUMES REAL INCREASES OF NEARLY 2% PER YEAR IN DEFENSE BUDGET, BEGINNING IN FISCAL YEAR 1992, FOLLOWING DECLINES OF 1% TO 2% IN FISCAL 1990 AND 1991

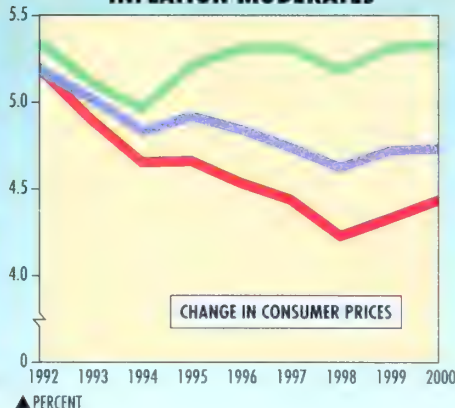
MODERATE CUTS 2% REAL ANNUAL CUTS IN DEFENSE BUDGET, BEGINNING IN 1992

BIG CUTS 4% REAL ANNUAL CUTS IN DEFENSE BUDGET, BEGINNING IN 1992

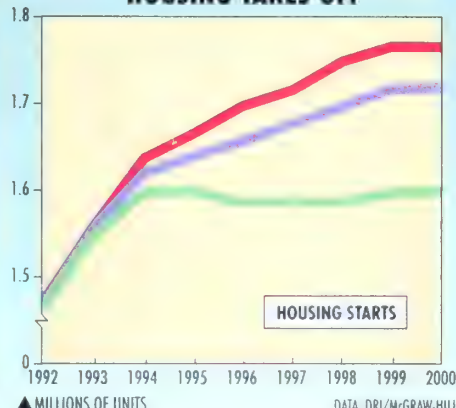
INTEREST RATES PLUNGE



INFLATION MODERATES



HOUSING TAKES OFF



Interest rates head south. Those lower rates not only spur business activity but also shrink the interest portion of the federal debt. Indeed, the benefits are so great that in both alternate scenarios—a budget surplus develops—although, says Christopher Caton of DRI, the chronic surplus wouldn't be sustained. "You would have to assume some redistribution through tax cuts."

That's but one way in which the simulations don't capture the range of responses to events that might be possible. If the defense cuts, for instance, translated one-for-one into overall net savings. But it's more likely that the large savings could be made in other areas, there would be a reallocation of at least a portion of the resources toward spending on infrastructure and education. Such investments, long ne-

glected by the federal dollar, could produce long-term payoffs above and beyond the savings that budget-cutting might yield. Furthermore, since defense spending is so production-intensive, the model initially yields a sharp slowdown in manufactured-goods output, DRI's Caton notes. But it's unlikely that this process would continue unchecked. With severe dislocations likely to take place in certain industries and regions, the government might introduce financial assistance and retraining to cushion the blow.

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Over the past 10 years, the Defense Dept.'s share of the federal R&D dollar has risen from 45% to 67%

far larger impact. Over the past 10 years, the Defense Dept.'s portion of the federal R&D dollar has risen from 45% to 67%. Approximately 30% of all scientists and engineers are employed in defense-related research and production. Redirect those resources into civilian efforts, and that will have a "supercharging effect on productivity and growth," says Lloyd J. Dumas, an economist at the University of Texas at Dallas.

The DRI simulations show that gains will accrue irrespective of such considerations. But planning could help ease the downside of defense cuts, and a reallocation of resources might bring extra benefits. Then the short-run economic pain would not be as significant as the model predicts, while the long-term dividends would be that much larger.

By Karen Pennar in New York

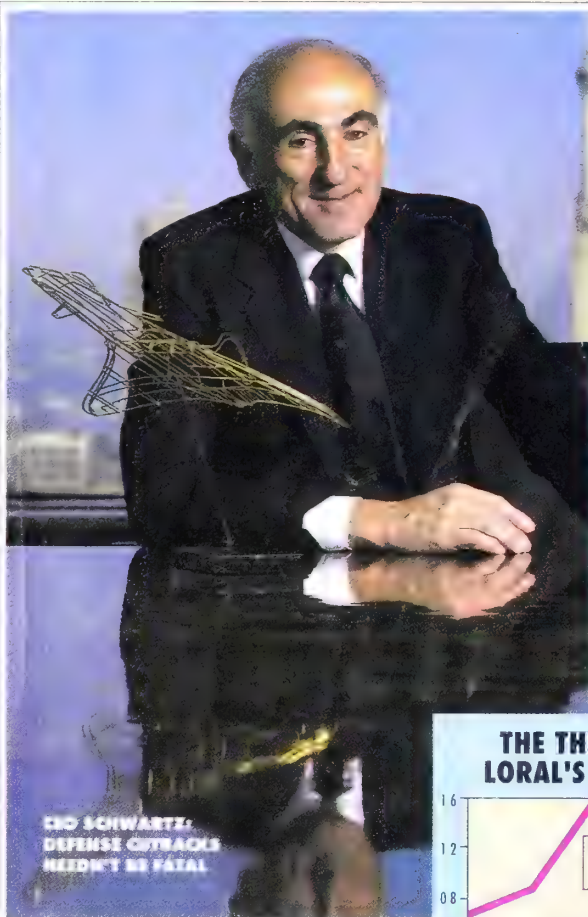
OPERATION ILL WIND WHIPS THROUGH LORAL

Investors fret as the U.S. probe jeopardizes a major contract

It could have been a banner week for Bernard L. Schwartz, chairman of defense contractor Loral Corp. On Monday, May 15, he bought most of Fairchild Weston Systems from Schlumberger Ltd. for a bargain price of \$185 million. The next day, he announced a 22% earnings jump for the fiscal year ended Mar. 31. But by Wednesday, Loral's stock had dropped more than two points, to 31.75. Loral had become the latest target of the government's sweeping Operation Ill Wind probe into defense procurements.

On May 12, the General Accounting Office urged the U.S. Air Force to rescind a major electronics contract Loral had won last December. Competitor Litton Systems Inc. had protested the award after a Justice Dept. affidavit was unsealed showing that Loral obtained sensitive Litton documents from consultant William Galvin, one of the scandal's central figures. The GAO ruling isn't binding, and the Air Force has asked the agency to reconsider. But even if the contract stands, the government promises to keep investigating Loral's alleged wrongdoings and could penalize the company later.

'A BITCH.' Scandal or no, it's an uncertain time for Loral. Like other defense companies, it faces a flat budget, increased administrative scrutiny, and stiff competition on every bid. While Loral's earnings from continuing operations rose 22%, to \$60.3 million this year, sales grew just 4%, to \$1.2 billion. Moreover, Loral's backlog has suffered from a dearth of new bidding opportunities and program delays (chart). The stock has recovered to about 33 but still trades 19% below its 12-month high. Says



CEO SCHWARTZ: DEFENSE OUTRACKS NEEDN'T BE FATAL

Schwartz of the contracting environment: "It's a bitch."

But that hasn't slowed him down. In March, he put \$10 million of his own money into a controversial deal to buy from Loral two slow-growth nonelectronics businesses. Loral had acquired the units—which make antiskid airplane brakes and crash-resistant fuel tanks—as part of its 1987 purchase of Goodyear Aerospace Corp. But since they didn't fit Loral's niche, Schwartz decided to sell them. Trouble was, the best offer he could muster was \$320 million. So he led a group including Shearson Lehman Hutton Inc. that anted up \$455 million in cash and convertible debt.

Some investors cried conflict of interest—particularly after another company came in with a similar last-minute offer. But that offer hinged on further negotiations, and analysts note that as Loral's biggest stockholder, with 6% of the shares, Schwartz has as much interest in the company's health as anybody. Loral promptly used some of the cash to buy Fairchild Weston, which will add \$100 million in new sales and \$310 million in backlog. Specializing in surveillance, aging, and training-simulation systems, Fairchild fits well with Loral.

CHOICE BID. Indeed, as the troubled contracting environment drives down asset values, buying other companies and their contracts can be cheaper than bidding for new business. But, as one institutional investor notes, acquisitions are only a partial solution. Loral's existing program base of self-protection, surveillance, and simulation systems is healthy. But long-term growth will depend on new contracts. "The backlog has to be the first thing that's going right," says the investor.

That's why the GAO dispute is so ominous. The contract is to provide radar warning systems to the Air Force's F-16 program. As it expands to include other planes and foreign-owned F-16s, analysts say it could mean \$2 billion in business through the 1990s. Says Kidder Peabody & Co. analyst Michael Lauer: "This contract changed Loral's future prospects from nominal growth to fairly significant growth."

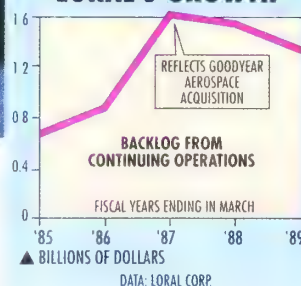
For its part, Loral has suspended Lou Oberdorfer, a marketing vice president named in the affidavit. And while the company admits it reviewed documents from Galvin, it insists the data didn't change its bid, which undercut Litton's by \$90 million. That's \$100 million the Air Force doesn't want to give up. In asking the GAO to reconsider, procurement

officials argue that "to terminate the contract will only cause harm to the government." They insist a better course of action would be to suspend or fine Loral later, if the evidence warrants it.

In the end, the Air Force may convince the GAO that its recommendation is too pricey a solution. Schwartz says he's confident the contract will be saved. But given the government's persistence throughout the Ill Wind investigation, it is unlikely Loral will escape completely unscathed.

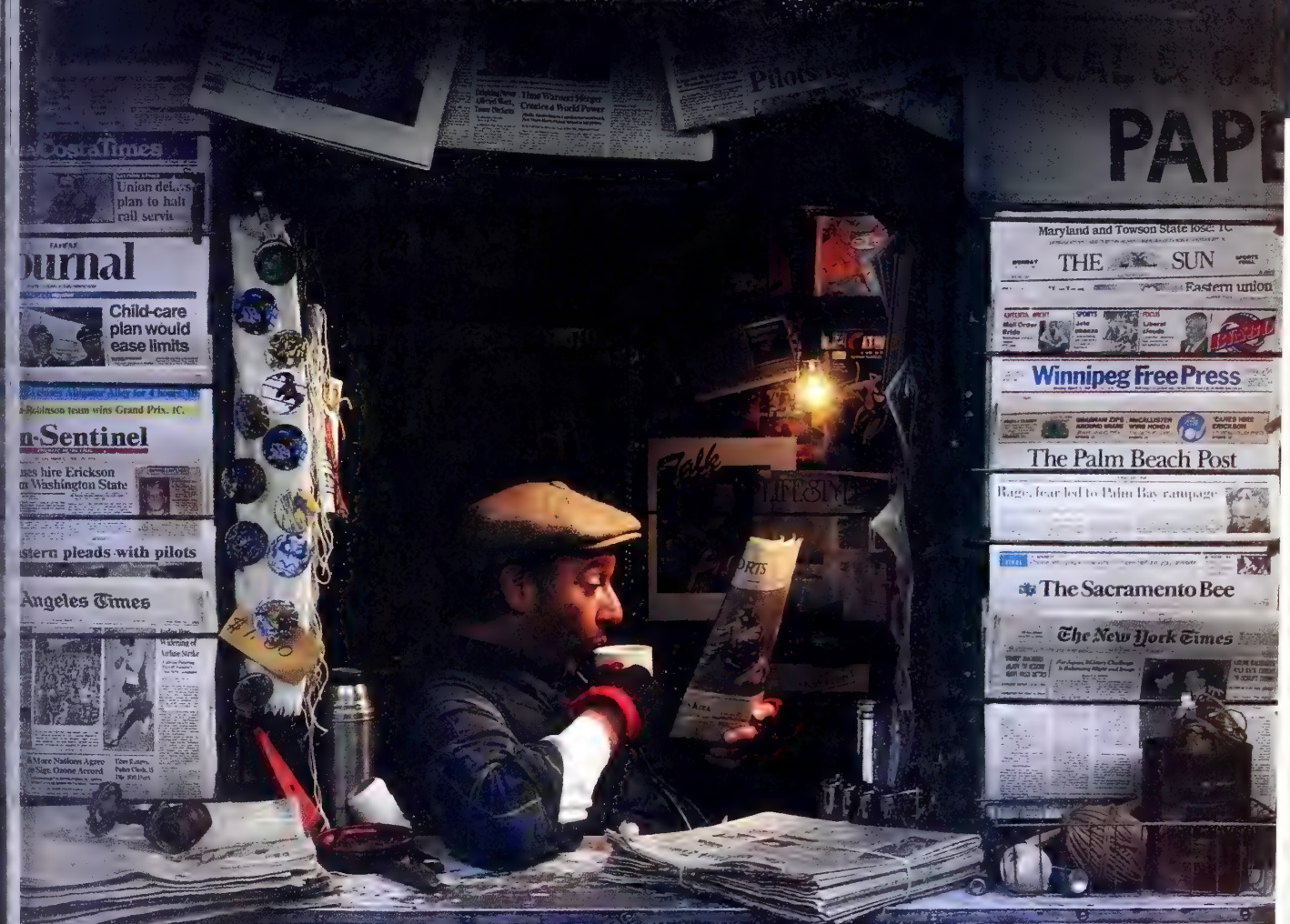
By Michael Oneal in New York

THE THREAT TO LORAL'S GROWTH



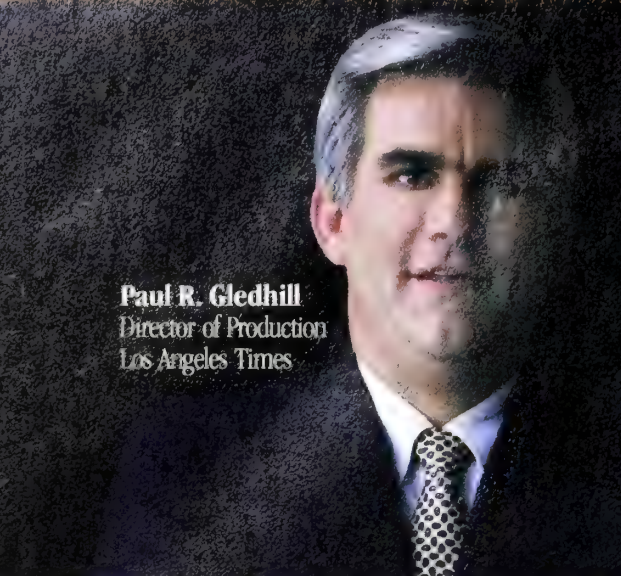
When the publishers of this many newspapers
all agree on anything, that's news.

But that was the story
when a group of industry experts said,
"Let's reach a little higher."



Eddie's NEWSSTAND



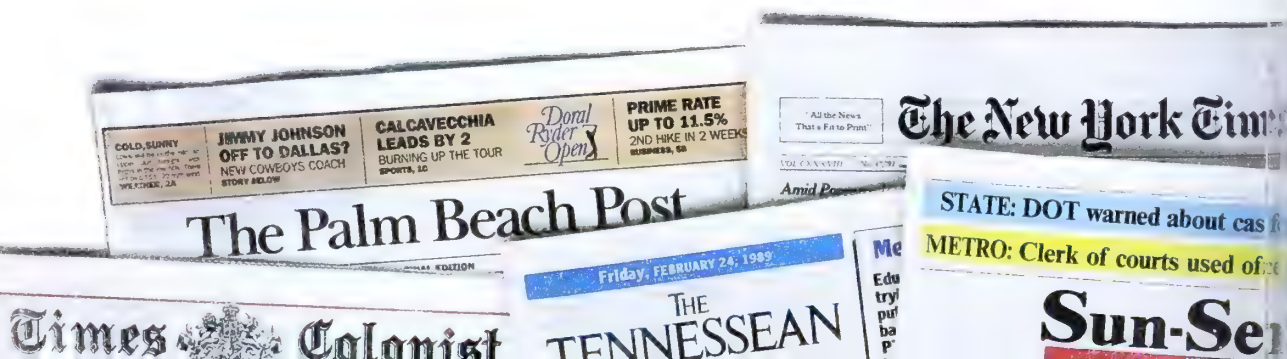
A black and white portrait of Paul R. Gledhill, a man with dark hair, wearing a dark suit, white shirt, and a patterned tie. He is looking slightly to the right of the camera.

Paul R. Gledhill
Director of Production
Los Angeles Times

A black and white portrait of Dan Machaj, a man with glasses, wearing a dark suit, white shirt, and a red tie. He is smiling at the camera.

Dan Machaj
Manager, Design and Development
Graphic Systems Division
Rockwell International

In recent years, the newspaper business has been faced with an increasing need to print more color. Unfortunately, until recently color could only be added at the cost of overall page count. But thanks to an industrywide advisory group formed by Goss Products, the graphic systems people of Rockwell, newspapers are now able to have their cake and eat it, too. Here's the story from the people who made it happen.





Thomas M. Cox
Production Director
The New York Times

Michael Bella
Vice President
Production Director
The Times Journal Co.

Mike Kienzle
Director, Marketing & Sales
Graphic Systems Division
Rockwell International

Kienzle: Today's daily newspapers need the ability to compete with other media for advertising revenues — tv, magazines, preprinted inserts.

Gledhill: Well, it's no longer a black and white world. As we told Rockwell, we wanted the ability to print a full 96-page *Los Angeles Times* along with process color.

Cox: I first got involved when my boss came in and said, "The Grey Lady's going color." That was a first for us.

Kienzle: The original idea for the Colorliner press went back to some discussions we were having with Gannett, isn't that right, Danny?

Machaj: I thought it was all your idea.

Kienzle: Well sure it was. But those initial discussions led the engineers to putting some circles on paper to see how we could do things better. Then Danny's guys built, would you believe, a plywood mockup of the Colorliner.

Bella: Actually, it looked pretty good made out of wood.

Cox: It was certainly the first wooden press we ever bought.

Machaj: These guys climbed all

over that thing. And they were not at all bashful about telling us what they thought.

Bella: That group had a lot of input on the design. I think it was the first time I ever saw Goss (or anybody else) sit down with a group of people and say, "Look, tell us what you think about this. It's important."

Kienzle: I think we've done more customizing to customers' wants and needs than ever before in the history of our company.

Cox: You had the feeling that they were working with you... that you had input into the design and manufacture of your press.

Bella: Right. Everybody wanted something different. We chose a very colorful press, a press that can open doors for us in commercial printing.

Gledhill: All we wanted was a press that would put us in the forefront of technology for the next 40 years.

Machaj: Obviously we can't do everything everybody's way. We have to make some final calls.

Bella: But there really did seem to

be a middle ground that everybody's happy with. We've got our first press up and running and I'm sure that soon we'll have another meeting to get back together and say, "We've got some of these presses running now and here's what we're finding."

Kienzle: You'll be glad to hear it's already in the works, Mickey.

Cox: The one thing you can say is the people are customer oriented. I don't care how long you've had a Goss press, they're going to back you up.

Let's reach a little higher.

Rockwell's Graphic Systems Division is an acknowledged leader in large newspaper printing presses and part of our international team of more than 100,000 Rockwell people. Working together and with our customers, we apply science and technology to reach a little higher in aerospace, electronics, automotive, industrial automation and graphic systems. If you'd like to know more, write: Rockwell International, P.O. Box 39185, Department 815B-03, Los Angeles, CA 90039.



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...where science gets down to business





WILL THIS VIDEO CHAIN STAY ON FAST-FORWARD?

Blockbuster could get snarled in its accounting methods

For those who scoff at the explosive growth of his Blockbuster Entertainment Corp., H. Wayne Huizenga has a simple retort: "You either believe in the industry or not." Say this for Huizenga (pronounced high-zen-ga): He has believers. In two years, he has expanded Fort Lauderdale (Fla.)-based Blockbuster from 100 video rental "superstores" to 700. Profits nearly quadrupled to \$15.5 million last year as sales tripled to \$137 million. For its part, Wall Street has bid the company's stock up nearly sevenfold since 1987. But then, who wouldn't bet on the man who earlier helped convert a small trash-hauling company into a multibillion-dollar empire called Waste Management Inc.?

There are some. On May 8, Bear Stearns & Co. took a sharp poke at Blockbuster's balloon. In a harshly contrarian report, accounting analyst Lee J. Seidler alleged Blockbuster's 100% rise in 1988 per-share profits was achieved largely with overly aggressive accounting. The stock dropped 7 points, to 27, in 6 days. But rather than turning on Huizenga, his army of Wall Street supporters blasted the messenger. Chicago Corp. analyst Gary Wirt griped that Bear Stearns's report presented the absolute worst-case scenario. Within three

weeks, Blockbuster was back at 33, a lofty 57 times earnings.

The episode did, however, raise an unsettling question: Will Blockbuster's accounting practices haunt it in the form of lower future earnings? Huizenga's strategy depends on industry growth staying hot, even though it is already showing signs of cooling. Blockbuster plans to add 300 stores this year; profits and sales are expected to double. But Bear Stearns questions the quality of those earnings.

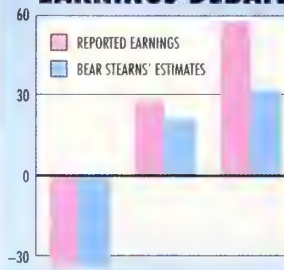
FRANCHISE BONANZA. When Blockbuster buys a video chain, it stretches out the accounting charge for the deal's goodwill over 40 years, the longest period allowed by accounting standards. The result is that the expense is lower over the short term but affects earnings for a long time. There are no hard and fast rules, but Jay Shapiro, an entertainment accounting expert at Laventhol & Horwath, agrees with Bear Stearns that Blockbuster is mortgaging its future: The company gets higher profits now, but

if revenue growth slackens, the extended goodwill schedule could hurt its earnings later.

That gives investors plenty to worry about. But there's more. When a franchisee signs up with Blockbuster, it pays a onetime franchise fee as well as a fee to lock in its territory. It also buys its initial inventory from the head office. Last year, Blockbuster received 28% of its revenue from such onetime payments. If Blockbuster keeps opening stores forever, that's fine. But, says Shapiro, "if franchise growth stops it would definitely hurt earnings." Bear Stearns also notes that the Securities & Exchange Commission could easily force Blockbuster to shorten its amortization schedules, thereby dropping earnings precipitously. By amortizing over 40 years, Bear Stearns figures Blockbuster's earnings would have been just 3¢ a share last year, not the reported 8¢ (chart). That would put Blockbuster's earnings multiple at an overblown 18. Analysts who back Huizenga insist Bear Stearns's five-year schedule is ridiculously conservative.

Huizenga, who wouldn't comment on this article, agrees and stands by his practices. In a previous interview, he said his formula relies heavily on a prediction that by 1995, 6% of U.S. homes will have VCRs, against 66% today. Some experts, however, say the video business is already maturing. With VCR sales picking off, entertainment analyst Peter Ting of

A BLOCKBUSTER EARNINGS DEBATE



▲ CENTS PER SHARE

DATA: BLOCKBUSTER ENTERTAINMENT, BEAR STEARNS & CO. INC.

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chard Blum Associates believes even % penetration is optimistic—especially the laser disks now hitting the market come the next fad.

Cable TV presents another, if more distant, threat. Already, nearly 14% of the S. homes wired for cable subscribe to services that charge only for movies they watch. Selections are limited, but cable companies are developing systems to offer more releases. Then there's growing rental competition from warehouse-size record stores and supermarkets. Warns entertainment consultant Benjamin of New York's Silberberg, Rosenthal & Co.: "I wouldn't put my eggs in one basket."

Huizenga, 50, is accustomed to doubt. He spent much of his career at Waste Management, which he and two partners founded in 1972. There he battled allegations of price-fixing, improper influencing government officials, and illegally dumping hazardous chemicals. In 1976, Huizenga signed a consent decree with the SEC promising not to make illegal campaign contributions. And this was the first time he has taken heat at Blockbuster. Kellogg Associates, a Los Angeles accounting firm, began debunking the rosy financials a year ago. Then, in February, Blockbuster stock shot up when it hailed a distribution agreement with Walt Disney Co. When Distersely noted the deal wasn't exclusive to Blockbuster, the stock retreated.

STAKE. But it's hard to argue with Blockbuster's formula: By offering 7,000 stores average \$70,000 in monthly sales—well above competitors'.

The glue that holds together Huizenga's strategy, however, is the share price. The higher it goes, the easier it is to make low-cost acquisitions with stock. Huizenga benefits, too. He bought Blockbuster in 1987 with two other Waste Management veterans: John J. C. now a franchisee, and Donald F. C. currently Waste Management's financial officer. The trio owns 25% of the company's stock. But are they painting an unduly bright picture at the time of future earnings?

Many investors don't seem worried. Res Gulfstream Financial Associates analyst R. Jerry Falkner: "Even if technologies do displace Blockbuster by that time, we will have made so much money I really wouldn't care."

Short-seller Joseph Feshbach of Alto, Calif., says it's too soon to bet on Blockbuster's decline. Huizenga may be confronting more naysayers these days. But as long as he keeps making money, his many believers are likely to hang on for the ride.

Pete Engardio and Antonio N. Fins
Miami

PIPER MAY STILL BE CARRYING EXCESS BAGGAGE

Chairman Millar turned it around, but lawsuits could cripple it



MILLAR: HE HAS BUILT PIPER'S ORDER BACKLOG FROM \$6 MILLION TO \$150 MILLION

Piper Aircraft Chairman M. Stuart Millar was recently showing a customer around the company plant in Vero Beach, Fla., when the visitor, a trained pilot, admired Millar's own sporty Piper Cub parked on the tarmac. Millar promptly invited him to try it out. "Take it up," he urged. "Have fun."

The 64-year-old Millar wants to put the fun back into flying. He says that's why he bought Piper Aircraft Corp. in 1987. So far, his unorthodox approach to business is paying dividends: Piper is thriving under his exuberant management. In the two years Millar has been in charge, the company's order backlog has gone from \$6 million to \$150 million. **'EARNEST AS HELL.'** Employment has doubled to 1,550, as Piper plans this year to deliver 600 of its small, propeller-driven planes to executives, recreational fliers, pilot schools, and airlines. Sales for 1989 should hit about \$150 million. Millar, a World War II fighter pilot who took his first flight lesson at age 16 in a Piper Cub, declares that Piper is profitable and that he is a happy man. "No one," he says, "could have come closer to his heart's desire than I have."

Yet, Piper could still break Millar's heart. Industry executives wonder if he

can profitably fill all the new orders he has landed by reintroducing old models at cut-rate prices. Says one former Piper executive: "Stuart is as earnest as hell about aviation, but he's naive about airplane manufacturing." And the company labors under the threat of 60 potentially crippling product-liability suits, which charge that errors of manufacturing and design are the root cause of crashes involving Piper planes.

Although Piper long defended the integrity of its product, the cost of those suits had combined with other problems to push the plane maker to the brink when Millar arrived on the scene. Founded by William Piper in 1937, the company had an illustrious reputation as the maker of light, sturdy planes with names like Warrior and Navajo. Piper's fortunes peaked in 1978, when it rolled out almost 3,000 aircraft. Then the market collapsed for Piper and its rivals. Overproduction pushed down prices just when a wave of lawsuits forced insurance premiums up sharply. By late 1986, Piper, then owned by Lear-Siegler Corp., was paying a \$25 million premium for coverage in excess of \$100 million and only selling around 300 planes a year. When the investment firm of Forstmann

Little & Co. bought Lear-Siegler, Pier seemed ready for liquidation.

Watching all this with dismay was Millar, an avid flyer from Newport Beach, Calif., who had modestly successful businesses in microfilm and industrial instruments. Millar offered to take Piper and its liabilities off Forstmann's hands for a sum he refuses to divulge (the estimates range from next to nothing to about \$6 million). By May, 1987, Piper was his.

Once in charge, Millar acted fast to generate new sales and develop customers, he stripped down an existing Piper model and turned it into a trainer plane, the Cadet, which he offered at a low price. Major flight schools at the University of North Dakota and Embry Riddle in Florida placed big orders for the Cadet. Millar also sold Pipers as training aircraft to foreign airlines such as Alitalia and All Nippon Airways Co. For recreational fliers, Millar reintroduced a souped-up version of the classic Cub, and for executives he produced a more powerful model of the popular six-seat Malibu. Now, he is reviving an old Piper program that trains pilots.

CASH CRUNCH. Millar's initial success has won him many admirers. Says John D. Odegard, dean of the Center of Aerospace Sciences at the University of North Dakota: "Not only is Millar for real, but he might be the man to turn around general aviation."

But before Millar saves the industry, he must resolve Piper's legal woes. His first steps were to cancel Piper's pre-1987 insurance policy, set aside a reserve for potential damages, and hire lawyers to fight to the finish any suit he deemed unwarranted.

Millar's bold approach can be costly. In December, Piper lost a \$5 million judgment stemming from a 1985 crash that Millar could have settled for \$800,000. Competitors say the judgment has strained Piper's cash flow, already stretched to cover escalating production schedules. Millar disputes that, adding that any cash crunch has been relieved through a \$15 million credit line Piper has obtained from Congress Financial Corp., a New York-based finance company. And Jan VonFlatern, Piper Aircraft's general counsel, points out that the company's estimated \$13 million in legal fees for 1989 is still less than the cost of insurance, while far fewer lawsuits are being filed.

Should Piper be hit with a major judgment, Millar says, he will simply turn over the company keys to the winner of the suit. But if he avoids that unhappy fate, he may yet restore one of the best-known names in aviation.

By Gail DeGeorge in Vero Beach, Fla.

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DETROIT TRIES TO REV UP

CAN BETTER MARKETING REVERSE A SALES SLUMP?

America's five-year car-buying spree is running out of gas. The signs of trouble are everywhere. New-car sales slowed 8% in the first four months of this year, and combined car and light-truck sales could fall below 15 million units for the first time since 1984. The industry's favorite quick fix—the \$1,000 giveback or 0% loan to the car buyer—failed to give the crucial spring selling season much of a jump start. And after winning back market share from the Japanese last year, U.S. manufacturers are again losing ground.

Even before all the bad news, Detroit was beginning to recognize that it needed to rev up its marketing efforts. After all, the winners in any tightening market are the competitors that can take sales away from the other guy. The Big Three may have improved their product quality, gotten their act together in design and styling, and chiseled away at their heavy cost structures. But when it comes to such basics as advertising, promoting, and selling, the auto giants have been stuck in low gear—and that could take a heavy toll as auto sales stall.

The stakes are high for both the industry and the U.S. economy. Already, Ford Motor Co. and General Motors Corp. have trimmed production plans and idled some plants. In the wake of disappointing mid-May sales numbers, for example, Ford announced that it would temporarily close two U.S. assembly plants, its first shutdowns since 1983. And Chrysler Corp. dropped plans to recall 1,600 workers.

TRAFFIC JAM. The stagnating market comes at a particularly frustrating time for U.S. auto makers. Detroit has significantly narrowed its quality gap with imports—and the perceived gap is expected to disappear in the early 1990s (chart, page 81). But the U.S. car market is becoming an increasingly crowded, noisy place, where even a top-notch product

has trouble pulling away from the pack.

At the same time, a glut of more than 350 different models of cars and trucks has weakened the advantage that any one producer holds in styling or technical gadgetry. And carmakers have doubled their ad spending in major media during the past five years, to nearly \$2.8 billion a year. Amid this costly, clamorous confusion, marketing will become an even more crucial battleground for the auto industry in the 1990s.

To arm themselves, Detroit's carmakers are looking to ad agencies and consumer-goods companies such as Procter & Gamble Co. for inspiration and marketing managers. They're using more sophisticated market research to find out who their customers are and what they want. They're pressing their ad agencies to produce more creative, more effective ads. They're experimenting with everything from direct mail to computer disks to find new ways to reach sales prospects. They're even starting over again with new brands such as Saturn, trying to tap the best of the new marketing without the worst baggage of the old.

And in what could be Detroit's most contentious issue, carmakers are also struggling to gain more control over what happens to customers when they reach the dealer—the point at which all the industry's lavish marketing efforts can come to naught. There's certainly room for plenty of forward motion. After all, Americans love cars, but they hate car dealers (page 83).

Unfortunately, Detroit doesn't have a great track record when it comes to recognizing and responding to the changing needs of consumers. It managed to lose 13% of the domestic market from 1978 to





NEW MODELS With the U. S. auto market tightening, the Big Three are searching for new ways to reach and excite drivers. For Chrysler's Dodge Div., that could mean launching daring new products, such as this Viper "concept car."



NEW DEALERSHIPS GM is now trying to get dealers to clean up their acts. The company would like more of its retailers to be like Henry Butts Oldsmobile in Carrollton, Tex., where customers get the red-carpet treatment.



The critics were moved.

"One of the finest ever-wheel-drive performance cars, its driver and front-seat passengers are treated to first-class accommodations in comfort and ergonomics."

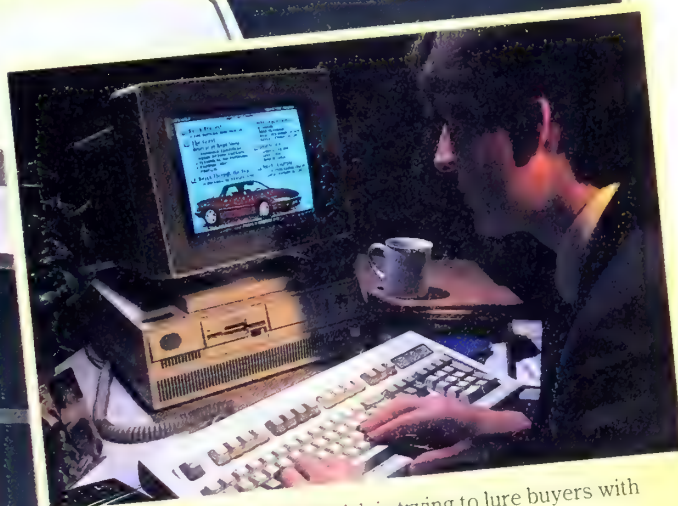
"Not only does the Probe GT accelerate, handle, and brake with the ability of a world-class performance car, its driver and front-seat passengers are treated to first-class accommodations in comfort and ergonomics."

"The Probe GT's suspension is a masterpiece of engineering, providing a smooth, quiet ride and excellent handling."

"The Probe GT's interior is a masterpiece of design, providing a comfortable and spacious environment for the driver and passengers."

Ford Probe and Probe GT

ADVERTISING At Ford, a joint project produced the successful Probe, engineered by Mazda and styled by Ford. To move such offerings, domestic manufacturers spent nearly \$1.5 billion on advertising last year.



CREATIVE SELLING GM's Buick is trying to lure buyers with software that lets computer users take a look at the cars on-screen. The electronic illustrations of each model even rev their engines and open their doors.

THE SELLING OF A DREAM

Car advertising reflects much of 20th century American history. Early ads had to explain what cars were. Later ads focused on image. Here, some scenes from our not-always-happy love affair with the auto.



BIG BEGINNINGS The Packard, one of 115 auto companies around long before anyone heard of the Big Three.



PAST LUXURY This ornate ad for a 1927 Lincoln Limousine was one of Detroit's first efforts at upscale marketing.



MASS APPEAL Supply couldn't meet demand in 1946, as Americans put their names on long waiting lists to get a car.



BOOM TIMES Postwar growth spurred at least one car in every drive in the 1950s. Meanwhile, auto makers couldn't add enough chrome, gave now-ubiquitous options.

1987 to foreign auto makers that were quicker to fill the growing demand for more-reliable, fuel-efficient cars. The Big Three lost an additional 1.5 points of market share this year to Japanese carmakers that put up new plants in America—and built solid marketing strategies to back their cars. For example, while Detroit confused buyers with one new campaign after another, Toyota Motor Sales USA Inc. has changed its theme only two times in the past 13 years.

IN THE DOGHOUSE. The U.S. car industry doesn't seem to get much bang for its ad buck, either. Take the experience of Chevrolet Motor Div. In 1986, its "Heartbeat of America" ad campaign captured the No. 11 slot on a survey of consumers' favorite ads. That was only the second time in nine years that a U.S. auto maker made the top 25. A year later, though, Chevy's ads had fallen to No. 19. Still, that's pretty good—until you consider that No. 20 was a campaign for Ralston Purina Co.'s Lucky Dog, and that Chevy spent \$187 million on the campaign that year—compared with Lucky Dog's \$4 million budget.

With successes like that, it's no wonder that the U.S. auto industry spends so much time in the doghouse. Even Detroit executives admit that their ads leave much to be desired. "As an industry, I think we're putting out a lot of crap," says Chrysler Motors Chairman Bennett E. Bidwell. "We're stoning the public to death with marshmallows."

That's when the industry isn't burying the public under an avalanche of re-

bates. With inventories averaging as much as 27% above normal by late March, the industry pushed its panic button, trying to fire up the market with cash-back offers and financing incentives of the sort that usually are not seen until midsummer, when it is time

to substitute for broader creative marketing strategies. And incentives are costly. Despite stronger sales and the company's highest market share since 1968, Ford's first-quarter U.S. auto profits fell 5.5%, largely because of higher marketing costs. Still, carmakers aren't likely to kick the rebate habit.

North America will have 2 million more cars than buyers next year, estimates Autodata Inc., a research firm.

That glut means continued giveaways—and, conversely, higher sticker prices. In late May, Ford upped the incentive ante by offering first-ever \$1,000 rebates on its luxury Lincoln Continental and boosting cash-back offers on subcompacts as the Mercury Tracer to as much as \$1,000. Just two weeks earlier, Ford had raised the base price of the Continental by \$433 and hiked the tab for some options. GM, which had raised its own option prices earlier, quickly extended several of its generous rebate programs.



"Very often, the difference between one product and another is the advertising, the brand personality"

LAUREL CUTLER
Chrysler vice-president

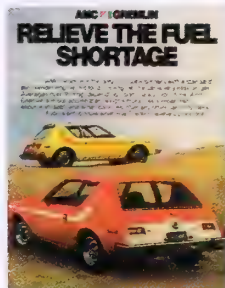
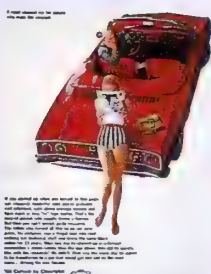
to clear the showrooms for new models.

Once upon a time, such incentives could shift sales into overdrive. In September, 1986, offers of 2.9% financing briefly pushed seasonally adjusted annual domestic car sales to 18 million units. But giveaway gimmicks no longer work so well—or for very long. The latest round of incentives boosted sales to an annual rate of only 7.7 million units by the middle of April, compared with 6.6 million in March without rebates. Worse, by mid-May, sales sagged back down to a rate of 6.7 million units a year.

That's particularly unnerving for Detroit, where such programs are often a

grams. By giving with one hand and taking with the other, carmakers think they can soften the rebate burden and ensure that they'll make more money on each car sold even if sales droop.

SMARMY SALESMAN. If there's any secret for Detroit, it's that the Japanese have been making their share of marketing blunders lately, too. While the campaign featuring "Joe Isuzu" has built brand awareness, the smarmy, lying salesman hasn't created a positive image for Isuzu: Its U.S. car sales fell 38% last year. And no one is immune from the rebate bug. Even once-invincible Honda Motor Co., stung by a 6.3% sales decline



INVASION The light of imports d in this 1960 ead. Detroit er be the same.

UNSAFE AT ANY SPEED Sexy ads lure buyers, but the Corvair also drew un-welcome attention from Ralph Nader.

GAS CRUNCH One of De-troit's answers to the en-ergy crisis in 1974—and a reason imports took off in the 1970s.

CAR CLICHE The ever-present auto image of the eighties: A "beauty shot" of a car winding down the road.

BACKFIRE Joe Isuzu's wildly exaggerated claims caught viewers' attention, but he hasn't been very good at selling cars. Joe tells one truth: Foreign carmakers can slip up in their marketing efforts, too.

the first quarter, began offering its cash incentives to dealers. Amid the gloom, there are signs that Big Three are starting to come up with some more effective artillery. Carriers know that if they're going to be going away part of their marketing efforts, they'll have to find the remainder as astutely. The most significant sign of Detroit's new emphasis on marketing may be the way it's being put in place of it. At Chrysler, Chairman Robert I. Nader has assumed the responsibility for car and truck advertising. "It's not the non-function of a chair- to do that," he says. "If we don't get right, then they'd be change me." There will not be instant solutions, though. The industry is struggling to relearn the sort of marketing that GM, Ford, and Chrysler rarely had to worry about during the heyday of their histories. Now, focused on production, engineering, design and simply whatever they can make. Detroit's experiments with key marketing concepts as segmenta- came in the 1920s, GM's then-President Alfred P. Sloan es- shed a pecking or-

der among GM divisions. First-time buyers would start with a Chevy, graduate to a Pontiac, and end up in a Cadillac.

The strategy became the standard for the auto industry. But the lines grew blurred because managers and dealers at each division wanted to make and sell a broader range of cars. "These guys said, 'Hey, I can do a cheap Olds and an expensive Olds, a small Chevy and a big Chevy,'" says Jack Trout, a marketing consultant. "They destroyed the meaning of their brands."

The blurring of brands has also complicated Detroit's relationships with its dealers. Powerful "superdealers" now offer dozens of car lines at multiple outlets. Only 5% of the nation's dealers, they sell 30% of all cars. Already, some superdealers have better local name recognition than some of the cars they sell. And increasingly, these dealers simply won't give "shelf space" to weak or redundant vehicle brands.

Now, Detroit aims to reestablish its brands as distinct entities. But there are some big hurdles. It still makes economic sense for manufacturers to tweak the same basic car into an Olds or a Buick. And plenty of dealers will still squawk when a

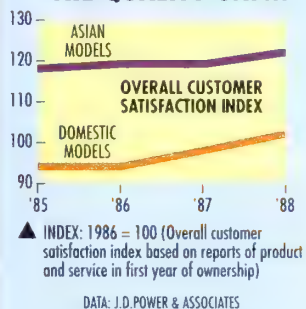
company tries to cut back its offerings to become more focused.

That's where Detroit can learn a lot from the sellers of soap and diapers, companies that use marketing to differentiate virtually identical products. Says Laurel Cutler, a vice-chairman at ad agency FCB/Leber Katz Partners and a vice-president for consumer affairs at Chrysler: "Very often, the difference between one product and another is the advertising, the brand personality."

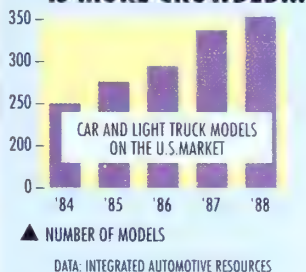
SYMBOL OF CHANGE. A consultant for Chrysler since 1985, Cutler became a symbol of change in an industry dominated by engineers and finance types when she was hired as the company's first woman vice-president last year. She's being asked to draw from her experience with such clients as General Foods Corp. and Campbell Soup Co. to boost Chrysler's brand-building efforts. Chrysler's emphasis on brands is partly the result of its experience with Jeep, which it acquired through a merger with American Motors Corp. in 1987. Unlike Chrysler's cars, Jeeps sell for premium prices—and sell out—thanks partly to their distinct image. "They see now, as perhaps they never had before, the power inherent in a real brand that stands for something," Cutler says.

Over at GM, Cutler's counterpart is Shirley Young, who is attempting to establish clear and separate identities for GM's divisions. Under Young's direction, each unit had to draft its own image statement: Buick is the "Premium American Motor Car," Cadillac is the "World Standard," Pontiac is the performance division, and so on. Now, Pontiac's Grand Prix has been given a racier look and Buick's Regal a softer suspension. Reporting to Young is Philip Guarascio, a former senior vice-president at New York ad agency D'Arcy, Masius, Benton & Bowles Inc., who was hired by GM in

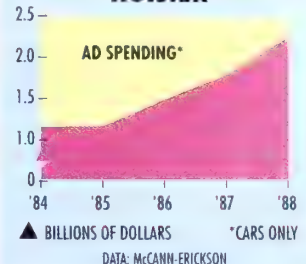
DETROIT IS NARROWING THE QUALITY GAP...



...BUT THE MARKET IS MORE CROWDED...



...AND IT'S GETTING NOISIER



Cover Story

1985. Guarascio began seeking better returns on his ad money through more savvy media buying and instituted GM's first annual reviews of its ad agencies.

Guarascio is putting the heat on the agencies because GM is already in the fire. Its new-car market share slipped to 35% in the first quarter, from 36% in 1988 and a 44% share as recently as 1984. As they try to battle back, GM's divisions are experimenting with flashy ads. Olds, for example, is beckoning new buyers with spots proclaiming "This Is Not Your Father's Oldsmobile." In one, Jay Carpenter and his father, astronaut Scott Carpenter, strap themselves into a Cutlass Supreme for blast-off.

Taking another leaf from the packaged-goods marketer's handbook, Detroit is looking for more sophisticated market research. The industry typically segmented markets along obvious demographic lines—young, first-time buyers, families, more-affluent drivers, and so on. Now, carmakers are trying to find out why people buy. "The kind of segmentation that has replaced demographics in packaged goods and now in automobiles is 'benefit' segmentation," says Robert Kernish, research group manager at Booz, Allen & Hamilton Inc. "Here, you're dividing people on the basis of attitudes toward the product itself."

MACHO MEN AND MOMS. Take four-wheel-drive vehicles. Many buyers want sporty trucks for the obvious reason: off-road recreational driving. But many suburban women also buy them for their carrying capacity and foul-weather safety features. "You're going to have two very different ads for the macho drivers and the car-pooling moms," says Kernish.

Cadillac is already changing its tactics in response to some revelations from research. In focus groups, it found that buyers associated Cadillac with safety only because of the car's size and mass, not because of design. So the division developed dealer information and ads emphasizing the safety features engineered into Caddies. Sales rose 36% in test markets, against only 19% in control markets. The cars were seen as safer than before, while the safety image of competitors such as Volvo and BMW deteriorated. Cadillac inserted its safety message into its national ads during the Masters golf tournament in April.

In another experiment, Buick Motor Div. lets consumers use a computer program to compare models, see a demonstration of how electronic engine controls work, and examine their financing options, all in their own home. Buick gave 175,000 free copies of its "Dimensions" software program to users of IBM and Apple computers last year. The company thinks the demographics of the

more than 3 million "computer comfortable" Americans fit its buyers' profile.

Even after taking a Buick for a test disk-drive, though, consumers still have to buy the car at a dealership. And most people "would probably want to have a root canal" rather than visit a dealer, says Jeremy P. Anwyl, president of USP Automotive Advertising in Irvine, Calif. To prod their dealers to higher ground, manufacturers have been trying to reward retailers for pleasing customers instead of just for high sales volume. "We no longer recognize the guy who sold 200 units, maybe by ripping off the customer," says Richard L. Fenstermacher, Ford Div. general sales manager.



'People don't take pictures of their Big Macs'

PHILIP GUARASCIO
GM advertising guru

Now, carmakers are getting more involved in retailing. At Chrysler, for example, some 3,500 managers are calling more than 180,000 Chrysler owners to ask how they were treated by dealers and how they feel about Chryslers. "The next great leap forward in the car industry isn't going to happen in Detroit," says Chrysler Chairman Lee A. Iacocca. "It's going to happen at the dealership."

To some dealers, though, the carmakers looking over their shoulders are also breathing down their necks. They wonder what wholesale manufacturers know about retail sales. "We don't want somebody who's run their business so poorly to tell us how to run our business," says

Ronald B. Tonkin, president of the National Automobile Dealers Assn.

Sometimes, though, it's dealers who tell carmakers how to run their business. Last fall, Ford's Lincoln-Mercury Div. unveiled Mercury's new ad theme "Mercury: Where Comfort and Control Are One." The dealers refused to take the line in their local ads, and they forced Ford's hand. The company tried to keep its marketing consistent at the national, regional, and dealer level. That improves brand recognition, and it's one reason Ford's first-quarter market share rose 1.6 percentage points to 23.4%. In three months, Ford kicked the new campaign, and brought back the familiar growling cougar after a 10-year absence. "We're doing this because the dealers told us to," admits Ross H. Herts, vice-president and general manager of Ford's Lincoln-Mercury Div.

STARTING FROM SCRATCH. In their best attempts to use the best marketing techniques, some carmakers are starting from scratch. Toyota's Lexus Div., Nissan's Infiniti Div., and GM's Saturn are all creating new cars, new brand identities, and new marketing and retail organizations. Launching an unknown brand is extraordinarily expensive, but it has some advantages. "Lexus does not have a single dissatisfied customer," says J. Davis Illingworth, general manager of Toyota Motor Corp.'s new luxury division. "It has no past mistakes or liabilities to live down." As Honda did in 1986 with its Acura Div., Saturn, Lexus, and Infiniti are choosing from the best dealers and requiring them to build facilities devoted solely to that car line.

A key goal is creating consistency among dealers to build a coherent brand image. Infiniti, for example, requires its dealerships to follow the same architectural design, featuring Japanese-style wood-and-paper screens. Carmakers have "lost millions, and I emphasize millions, in brand identity by letting dealers put up different buildings across the country," says William R. Bruce, Infiniti's vice-president and general manager.

Of course, there are limits to the number of marketing lessons carmakers can learn from the folks who sell shampoo or cookies. Cars, after all, can't be redesigned overnight. Customers don't usually shop for autos on impulse, and they can't afford to make \$13,000 mistakes. On the other hand, consumers have more affection for their cars than for most other purchases. "People don't take pictures of their Big Macs," says GM's Guarascio. Carmakers are selling a product that Americans adore. You think it would be a little easier.

By James B. Treece and Wendy Zellner
Detroit, with Walecia Konrad in New York

DEALING WITH A CAR DEALER SHOULDN'T BE SO DEMEANING

Master repairs. Spiffy showrooms. "Loaner cars" when vehicles are in the shop. Caring salespeople. Birthday cards. Friendly receptionists. These, some car dealers believe, are ways to satisfy their customers. They might as well be polishing the hubcaps on a jalopy. For all their efforts to make customers happier, neither dealers nor auto makers are willing to address the core of car buyers' satisfaction: the suspicion that they're being ripped off. Car shoppers know that anywhere they go, list prices are going to be as padded as a nightgown on steroids, and they'll have to haggle. "We've got a legalized con game out there, in some ways," says Richard D. Recchia, executive vice-president at Mitsubishi Motors Corp. Other auto makers share Recchia's irritation. Despite their sophisticated new marketing approaches, carmakers have little control over the buyer's experience at the point of sale. On the surface, that's not much different from the challenge facing marketers of soap or televisions. Where a toothpaste or a buyer might shrug off overpaying by 4¢ or \$40, a car buyer is less sanguine about being taken to the hilt of \$400. And shoppers don't feel comfortable in a car showroom as if they were stepping into a war zone where they'll have to do battle.

Some shoppers enter the fray armed with invoice printouts from *Consumer Reports* or with advice from an array of manuals on negotiating car prices. Others hire mercenaries—car brokers, who promise to use their skills to get a better price than a mere amateur could. Such stratagems are popular because, after all, Americans don't want to haggle, right?

THE CAR WORLD. Except when they get to. Americans shopping for electronic goods or major appliances can go to Glitzy's Department Store and get the price on the tag, or to Wacky's Warehouse and try to talk it down. And many car shoppers want to haggle before they have picked

out their new car. The buyer has this trade-in, see, which clearly is worth more than the dealer is offering—just get a load of that baby's interior...

So for all that Americans claim to hate haggling, they're partly responsible for the souklike atmosphere at dealerships. Carmakers have tried simply offering lower prices. When General Motors Corp. introduced its GM10 coupes last year, it offered a low sticker on the Buick Regal and a higher price, but with rebates almost immediately, on the Oldsmobile Cutlass Supreme. The Regals languished on the lots, while the Oldsmobiles—similar

pers from easily learning that they could get the supposedly more prestigious Acura Integra for less money than some Honda Preludes.

SOMETHING EXTRA. The marketplace should offer a choice to those consumers who don't want to play the industry's various shell games. Some car buyers wouldn't mind paying the tagged price, or maybe even more, if they felt that they were getting something extra in the deal. That might be superior service, with a promise of a free loaner vehicle if their car needs repairs, or even being treated with a little respect in the showroom. Instead,

they have almost no choice: All dealers claim to compete on price. And they don't even do that well, given the typical car buyer's suspicion that the dealer is trying to take him for more than one kind of ride.

The system needs to change. But over the years, states passed laws to protect dealers from carmakers, and those laws now defend the status quo against retailing innovation. Manufacturers, preferring the loyalty of small dealers, have resisted the rise of superdealers who are big enough to carve out brand images for themselves. But keeping dealers weak is silly. "Bloomingdale's can be famous, and it doesn't harm the dressmaker who sells dresses there," notes Sidney J. Levy, chairman of

the marketing department at Northwestern University's Kellogg School.

It won't be easy for dealers—or anyone else—to unlearn the ways cars have been sold for more than 40 years. Dealers will have to stop their constant hawking of supposedly low prices and develop new retailing strategies that respect the buyers' intelligence. Manufacturers will have to relinquish some of their power over dealers. And buyers will have to stop demanding big bucks on their trade-ins if they want dealers to stop inflating the price of the car on the lot. But those who are willing to change will ultimately win the customer-satisfaction sweepstakes. Only then will buying a car be as pleasurable as driving off in one.



cars at comparable prices—sold at a steady clip.

Still, the car bazaar is largely the creation of Detroit and its dealers. Just like department stores, Detroit has taught drivers to expect a sale. Chrysler Vice-Chairman Gerald Greenwald admits that carmakers pad their price tags to limit the margin damage they'll suffer later, when they offer rebates.

Carmakers complain that dealers are sully the industry's reputation, but manufacturers do their part to flummox the customer, too. American Honda Motor Co. refused to let its Acura dealers set up showrooms next door to a Honda store. That was partly to help build a distinct brand image for Acura. But it also kept Honda shop-

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just went
down.
What do
you think?



People

CHIEF EXECUTIVES



DAVID HINSON IS STRETCHING MIDWAY'S WINGS

He placed a \$900 million order for 37 McDonnell Douglas jets

After a loud hum and a small jerk to the right, the 133-passenger McDonnell Douglas jet is suddenly racing down the runway of the Long Beach (Calif.) airport. Within minutes, the plane levels off at 30,000 feet, its nose heading toward Chicago. As the "No Smoking" signs click off, the dark-suited man at the controls scrambles out of the cockpit with all the enthusiasm of a kid who has just learned to ride a bike without training wheels. Beams Captain David R. Hinson: "How am I doing?"

Not bad, for a CEO. But Hinson, the former full-time airline pilot who now runs Midway Airlines Inc., has pulled off a much more impressive performance back at headquarters. Almost grounded by heavy losses in the early 1980s, Chicago-based Midway has cruised in the black on an operating basis ever since Hinson took the controls in 1985. While Midway's 1988 revenues of \$412 million make it a sparrow in skies increasingly ruled by airline hawks, the company's dominance at Chicago's close-in Midway Airport has helped it become one of only three startup jet carriers to survive airline deregulation.

Now, Hinson, 56, is pushing hard for growth. In late March, he announced a \$900 million order for 37 McDonnell

Douglas Corp. MD-80 jets, with option on an additional 37 aircraft. He recently unveiled the carrier's first national campaign and began offering coast-to-coast travel with flights between New York and Los Angeles. On May 31, Hinson bid \$200 million for the Philadelphia hub, some Boston facilities, and two Canadian routes of bankrupt Eastern Airlines Inc. "As we mature and become larger, decisions about where we want the airline become more critical," Hinson says. "The large carriers can make a mistake and survive. We can't."

GATEKEEPER. Buying a new hub makes sense, as Midway Airport won't be big enough to accommodate the airline's expected growth in the next few years. But Eastern, which wants cash quickly, has already agreed to sell its Philadelphia and Canadian routes to USAir for \$85 million. Chances are Hinson will start searching for another hub.

It's easy to see why he wants growth. Aggressive expansion by fare-slashing Southwest Airlines Inc. is pinching yields on Midway's key Chicago-Detroit route. With 46 daily nonstops, 22 of which go to Detroit for as little as \$100, Southwest has in four years become the second-biggest carrier at Midway Airport. Hinson's grip on 22 of the airport's

gates has helped contain Southwest, the Texas airline's new hubs in St. Louis and Detroit could start shaving Midway's profits.

ATRICIDE. That's the last thing Hinson needs. Although revenues have more than doubled since he took control, Midway's profits have been erratic. Last year, it reported net income of \$6.5 million—a drop of \$12.1 million from 1987. The decline was mainly because of low profitability on new routes and stiff competition from larger airlines' "triple-A" promotions. With those problems out of the way, 1989's first quarter might record earnings of \$2.9 million.

Wall Street remains wary. While Midway's share price has climbed roughly 30% in the past year, to about 15, over the past 24 months its stock has underperformed the merger-charged airline industry. And it still hasn't reached its peak high of 17%.

Some outsiders think Midway is vulnerable to a raider. Unless Hinson begins developing a second hub, he may

Midway—was general manager. After 10 years at the company, then owned by billionaire Howard Hughes, Hinson left to service and sell general aircraft.

He stumbled onto Midway in the late 1970s, when Tague invited him to invest in and become a director of a startup airline modeled after Southwest's high-frequency schedule out of Dallas' aging Love Field. Tague, who would become the new airline's vice-chairman, figured a similar strategy would work at abandoned Midway. The airport is only 20 minutes from downtown, much closer than O'Hare International Airport.

Early on, Chairman Arthur C. Bass made Midway an all-business-class carrier with four-abreast seating and free drinks. But not enough high-fare business passengers switched to Midway to compensate for the smaller number of seats on the planes, which led to operating losses of \$23.9 million in 1983 and 1984. Bass, now chairman of Cooper Cos., was shown the door in 1985.

Enter David Hinson, who had been quietly acting as a director for six years. His first prescription as corporate doctor was laying off 10% of Midway's flying staff to cut costs. Within three months, Hinson had also begun scrapping the all-business-class strategy and adding conventional coach seating to Midway's planes. The 19% increase in seats on its DC9s, the easing of air traffic restrictions, and the growth of Air Florida Inc.—acquired just before Bass's ouster—helped Midway yield a small operating profit for the first time since 1982.

SUING DOWN. Although Hinson comes across as rather buttoned-down, he isn't stuffy. At an announcement in April to name Midway the official airline of the Chicago White Sox, the team's owners arrived in dark business suits, but Hinson showed up wearing a White Sox jacket and baseball cap. Away from the office, friends describe him as a spirited tennis player. When he was a guest several years ago at a retreat held by the Conquistadores del Cielo, a group of 100 top aerospace executives, the Midway chief wasn't content just to mingle and enjoy the scenery: He was too busy winning the group's tennis tournament.

Given the current airline environment, Hinson must be equally aggressive at the office. While he probably won't get Eastern's Philadelphia assets, the early results from his assault on the West Coast are encouraging. In fact, by next spring, he expects to be offering service to San Francisco and San Diego. And if he's lucky, he might even get to fly a few of them himself.

By James E. Ellis in Chicago

MEET MIDWAY'S MR. EXPANSION

85 Hinson, brought in to rescue floundering Midway, cuts 10% of flying staff and scraps first-class service, stuffing more seats in each plane

86 With an 82% increase in passenger traffic, the company in the black for first time since 1982; earns \$9 million

87 Buys commuter airline Fischer Brothers Aviation to feed passengers to Chicago's Midway Airport in 19 U.S. cities

88 Expands system by 21%, adding eight new routes, but net income plunges 65%, to \$6.8 million

89 Announces plans to buy nearly \$900 million new aircraft; inaugurates coast-to-coast service; bids for Eastern's Philadelphia hub

DATA: BW, COMPANY REPORTS

little choice but to sell Midway to a likely expanding upstart like Southwestern or America West Airlines Inc. or to get an airline that wants a major presence in Chicago. "There's a bit of friction going on between the smaller carrier-like Midway and Southwest," notes Peabody & Co. analyst David G. Oster. "So the main benefit of small carriers teaming up is they would quit competing."

Hinson seems tailor-made to handle the challenge. After graduating with a master's degree from the University of Oklahoma, the Muskogee (Okla.) native joined the Navy for a four-year tour as a fighter pilot, then flew commercial jets for Northwest and United. In 1974, he landed as director of flight operations at West Coast Airlines, where he met T. Tague—who would later found

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SERVICE

THE 'REVEREND JACK' BELIEVES—NOW HE HAS TO DELIVER

Kemp is crusading for a new 'war on poverty' with a decidedly conservative arsenal

Under a steamy tent in LeClaire Courts, a down-at-the-heels Chicago housing project, the man they call "the Reverend" is booming his message of hope to several hundred poor black tenants. "We can't give up," he says, his raspy voice echoing across the courtyard. "Like Nehemiah, we've got to look forward. There will be slander, gossiping. But we've got to keep our hand on the plow."

Jesse Jackson doing a little sermonizing on home ground? It could be, except that the speaker is white, conservative, and an emissary of George Bush. The orator is, in fact, former New York Representative Jack F. Kemp, President Bush's surprise pick as Housing & Urban Development Secretary. Since Kemp landed the HUD job, the 53-year-old former All-Pro quarterback hasn't spent much time in Washington. Instead, Kemp seems to have picked up where his failed 1988 Presidential campaign left off. He's hit the road, visiting projects such as LeClaire Courts and St. Louis' notorious Cochran Garden.

Considering Kemp's stress on self-reliance over federal assistance, you might expect that he'd get a chilly reception from disillusioned representatives of the urban poor. After all, ghetto activists have seen many a HUD Secretary visit their blighted landscape, take the obligatory tour with cameras in tow, and disappear, never to be heard from again.

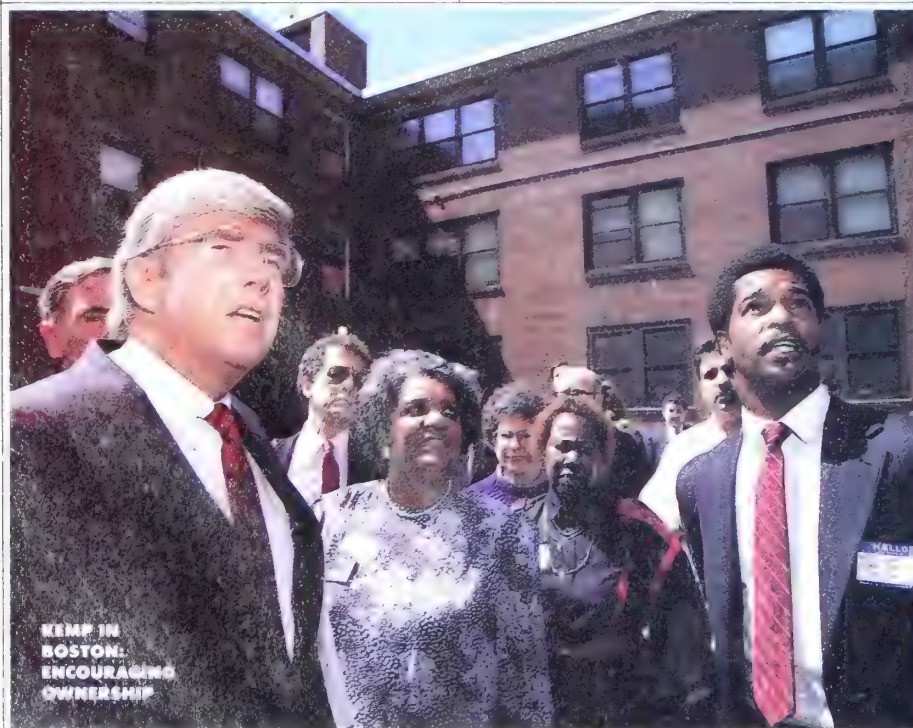
'AMERICAN DREAM.' Kemp, whom LeClaire Courts residents dubbed "Reverend Jack" in tribute to his ardent proselytizing, vows that things are going to be different this time. And so far, his optimism seems to be contagious. "Jack is really departing from the mainstream," says Robert Woodson, head of the National Center for Neighborhood Enterprise and a black self-help advocate. "He is making it clear that his priority is poor people."

Indeed, it's hard not to be swept up by the HUD chief's soaring calls for "a new war on poverty," even if it includes a distinctly different strategy from the last one. Kemp aims to sell off public housing to tenants, rather than to build

more units. He wants to spur investment in inner cities through tax breaks instead of direct spending. And in the face of a tight budget, he is encouraging volunteer groups and public-private partnerships to take the initiative in revitalizing urban neighborhoods (table).

"That is the American Dream—ownership," says Kemp, sitting in a panel HUD office decked out with a menagerie of portraits of Martin Luther King Jr., and other gifts that serve as icons of inspiration. "I know this program will work. We can develop this indigenous, entrepreneurial spirit."

The stakes are enormous. If Kemp's market-oriented policies for tackling homelessness, urban blight, and the lack of affordable housing are successful, something many experts question, he will win more than praise for being a good HUD Secretary. He also would provide a substantial boost to Republican efforts to woo away as much as 10% of the black vote from Democrats. Kemp's still-smoldering Presidential hopes would gain, especially if



KEMP IN BOSTON: ENCOURAGING OWNERSHIP

THE INITIATIVES KEMP IS PUSHING

HOMELESSNESS

He seeks \$746 million for shelters, including government property that could serve as temporary housing. He also wants \$50 million to help promising state and local shelter programs.

AFFORDABLE HOUSING

He backs a \$4.1 billion bill sponsored by Senators Alfonse M. D'Amato (R-N.Y.) and Alan Cranston (D-Calif.) that would subsidize low- and moderate-income housing and let first-time homebuyers tap their tax-deferred savings accounts for downpayments.

ENTERPRISE ZONES

He wants legislation authorizing 70 enterprise zones, through which tax breaks would go to businesses that locate in distressed neighborhoods. Cost to the Treasury: about \$150 million.



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Government

is successful in his early attempts to play a broad role in shaping the Bush Administration.

In some ways, it will be easy for Kemp to look good in his initial months in office. He succeeds the somnolent Samuel R. Pierce Jr., whose eight-year fling with invisibility at HUD earned him the handle "Silent Sam." Now, Pierce has become embroiled in a growing controversy triggered by a HUD inspector general's probe started last year. The investigation concluded that some top HUD officials used a housing rehabilitation program to steer lucrative contracts to political allies.

BRICKBATS AND KUDOS. At a blistering May 25 congressional hearing, Pierce told skeptical members of a House subcommittee on government operations that he was unaware aides had used the program to dole out political favors. In one case, a client who retained the consulting firm of Charles Black, Kemp's former campaign manager, raked in some big-bucks awards. "All we did was take a client and help coach them through the bureaucracy," Black says. "Nobody has done anything wrong."

Members of the committee, which continues to investigate the matter, do not feel that the involvement of Black, Manafort, Stone & Kelly has in any way compromised Kemp. In fact, Kemp won plaudits for shutting down the suspect program and instituting new audit safeguards. "I'm satisfied that it's cleaned up," says Kemp.

His rapid response to the HUD scandal is typical of Kemp's energetic approach. But despite his version of Reverend Kemp's Traveling Medicine Show, not everyone is impressed. "Local people are always going to show up when a national official comes into their neighborhood," says Jesse Jackson. "We need an urban policy, not an urban tour." Kemp counters that he does have a policy—just one that's a lot different from the traditional one. "I cannot match the Left in redistributing income... and HUD is not going back into the housing-construction business," he says.

Instead, Kemp plans to make greater use of a partnership approach used only sparingly so far. At a recent stop in Detroit, Kemp praised developers of a shiny new 19-story residential and retail complex near the downtown area. HUD provided the leverage for the \$69 million project with just \$6.5 million in grants. The rest, Kemp proudly says, came from local companies and tax-exempt bonds. Such efforts have even won approving murmurs from former advisers to Democratic Presidential candidate Michael Dukakis, who included the partnership idea in his platform. "Government can't

do it alone," says Christopher F. Edley Jr., a Harvard law school professor who was Dukakis' top domestic adviser during the campaign. "You have to harness the entrepreneurial skill and resources of both the public and private sectors."

As an unabashed promoter of supply-side economics, Kemp's favorite policy tool is the tax break. He is pushing legislation to create urban tax havens,

called "enterprise zones," which are supposed to promote development by offering business reduced tax rates. More generally, the President "recognizes that there has to be some incentive in the tax code directly targeted to housing and housing opportunity," Kemp says.

But not even a raft of tax breaks is expected to make a dent in the nation's intractable housing problems. That, urban experts

THE MAN WHO'S GIVING CHICAGO'S PROJECTS SOME R-E-S-P-E-C-T

Ask Vincent Lane about life in Chicago's sprawling public-housing system, and watch the wealthy real estate developer become a fire-breathing reformer. "People are sleeping in bathtubs to avoid gunfire. There's no respect for life in some of the projects," says Lane. "Until that changes, you can forget the rest."

Taking on the drug lords and gangs reigning over Chicago's crumbling public high rises is more than just tough

talk for Lane, 47. He's chairman of the Chicago Housing Authority (CHA). And since taking over in 1988, he has cut violent crime 13% with police sweeps, security checkpoints, and curfews. He has also shaken up CHA's torpid bureaucracy and pushed tenants to take on more responsibility for day-to-day management. Housing & Urban Development Secretary Jack F. Kemp has trumpeted Lane's brassy approach as a model for housing nationwide.

Lane's tactics have created some problems, however. The American Civil Liberties Union sued him for alleged illegal searches and other violations. Lane settled the suit by agreeing to back off on some of his practices. Also, his crime-busters' approach doesn't tackle a tougher challenge confronting urban housing officials: where to come up with the cash to upgrade and expand crumbling government housing?

'ECSTATIC.' Still, Lane has made dramatic improvements in his agency, which two years ago was nearly taken over by HUD because of inept management and financial woes. Gang violence helped push vacancy rates as high as 40%. At some complexes, janitors traded cleaning services for sexual favors. Lane has fired or reassigned virtually

all top managers at the patronage-ridden agency. Richard M. Daley, who recently replaced fellow Democrat Eugene Sawyer as mayor, demonstrated his support by keeping Lane. "Having changed an agency that has had no vision or accountability," says Daley, "I'm ecstatic."

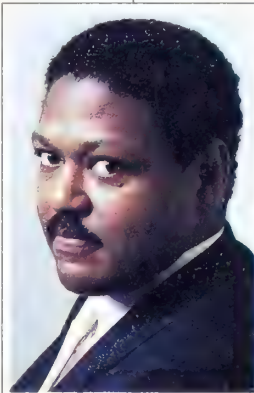
So, apparently, is Kemp, who mistakenly called Lane a fellow Republican in a recent TV spot. Lane, an independent, chuckles when asked about the faux

pas. But he and Kemp aren't that far apart ideologically. A longtime private-housing developer who earned his MBA at the University of Chicago, Lane believes federal funding isn't a panacea for improving the quality of public housing. "The average American thinks that money has been thrown down a rat hole," says Lane. "And they're right."

LOOKING UP. Kemp and Lane also share other goals. One is tenant management. Lane has already cleared a way for the residents of the 615-unit LeClaire Courts to handle such chores as collecting rent checks. He hopes to launch three more such efforts this year. Another mutual objective is seeing Lane succeed: In January, budget-strapped HUD agreed to pump \$40 million into CHA over two years.

The money is maybe a quarter of what's needed for capital improvements in Chicago's public housing. But for the agency's 145,000 tenants, things are looking up. "CHA had been putting the game on us for so long," says Irene Johnson of LeClaire. "Lane is willing to take risks." For the first time in years, slugging it out on Chicago's mean streets, Lane is offering something that's in drastically short supply: hope.

By Brian Bremner in Chicago



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believe, will take a lot more federal spending than a budget-conscious President Bush seems willing to tolerate. Deficit concerns were a key reason that Kemp lost a skirmish with the Treasury Dept. over whether to extend a \$3 billion tax credit designed to stimulate investment in low-income housing.

Kemp is likely to have trouble squeezing money out of Congress as well. Under a 1987 law, HUD can fix up apartments and sell them to tenants, as it did in selling Kenilworth-Parkside in the capital for \$1. But the agency expects to spend \$29 million renovating the 464-unit project. And that doesn't include the untold millions it will cost to find replacements for the sold units, as required by law. Yet Kemp believes the program is cheaper to society than leaving communities prey to "a sense of despair, hopelessness, drugs, crime, and gangs."

GLAZED EYES. Kemp's interests go well beyond housing. He frequently—too frequently, say exasperated White House aides—pipes up in Cabinet meetings. And he has been known to cause Bush's eyes to glaze over with discourses on economic policy. Kemp is a noisy critic of Alan Greenspan's tight-money policies and has called the Federal Reserve Board Chairman on several occasions to critique monetary policy. The HUD chief has also joined with Administration hardliners to argue against subsidized grain sales to the Soviet Union and with Council of Economic Advisers Chairman Michael J. Boskin to assail the toughening of Administration trade policy. Has George Bush taken umbrage at these Kempian excursions? "Nah, the President's been great," Kemp says. "For instance, with housing starts off and price indicators stable, you could make the case that the Fed overreacted. No one's called me on the carpet. Frankly, I think they agree at the White House."

That's pure Kemp. Assertive. Exuberant. And utterly self-assured. Right now, Kemp's dynamism and political savvy have won him favorable reviews, both on the Hill and among housing advocates. But what happens a year from now if reporters retrace Kemp's steps, revisit rundown areas he trekked to, and pronounce them, alas, still dumps?

"That stuff is predictable," Kemp sighs. "I'm not going to worry about it. I'll be judged by this: How did Kemp do in getting his legislation? Is there any change in expectations in these pockets of urban poverty? Is there any change in the reality of housing and jobs? There will be things to measure by. If, a year later, I'm still talking about enterprise zones, and there's only one community in the country that has moved into tenant management..." And then the ever-confident Kemp's voice trails off.

By Ron Stodghill II in Chicago

Finance

TAKEOVERS

MEET WALL STREET'S NEW BUGABOO: CFIUS

The agency can nix foreign takeovers on national security grounds

Tokuyama Soda Co., a Japanese chemical maker, was all set in January to make a friendly, \$59 million acquisition of General Ceramics Inc., based in Haskell, N.J. But a small unit happened to have a classified subcontract for the Energy Dept. for heat-resistant ceramics used in making nuclear weapons. That caught the attention of the Committee on Foreign Investment in the U.S. (CFIUS), which started asking some questions. Tokuyama Soda soon withdrew its bid.

CFIUS is one of Washington's legions of interagency committees, and until last August, it was as toothless and obscure as any. But the 1988 trade bill changed all that. Eight short paragraphs, known as the Exon-Florio amendment, gave the President the power to just say no to a foreign takeover on national security grounds. The new law also handed CFIUS the task of recommending when the President should nix a deal.

FEAR ON THE STREET? By investigating what used to be private transactions between consenting companies, CFIUS is swiftly taking its place alongside the SEC and IRS in its ability to strike fear in Wall Street hearts: Because of CFIUS's new role, many deals are suddenly vulnerable to being delayed, blocked, or worse, unscrambled long after they've taken place. As a result, investment bankers are starting to cut the price tags of companies whose sale to foreign bidders could raise a national security question.

And many could. Of 646 U.S. companies acquired by foreigners last year for about \$60 billion, CFIUS will review some 100, estimates Peter Rona, chief executive of IBJ Schroder Bank & Trust, a unit of Industrial Bank of Japan Ltd. Typically, he says, they'll be little-known companies that have about \$100 million a year in sales and "interesting technology" but "have run out of capital."

Senator J. James Exon's (D-Neb.) inspiration for the amendment came in 1987, when he went to President Reagan to protest Fujitsu's bid for Fairchild Semiconductor and Sir James Gold-

smith's swipe at Goodyear Tire & Rubber. The White House, says Exon, responded that there was nothing President could do short of declaring national emergency.

Both takeovers fizzled: Fujitsu withdrew its bid after Fairchild Semiconductor Corp.'s security clearance came under question, and what shareholder say was "greenmail" satisfied Goldsmith. But the call was close enough



persuade Congress to pass the bill, sponsored by Representative James Florio (D-N.J.), giving the President and CFIUS—new power.

Companies are already learning the lesson: They call in CFIUS early—and most 55 cases to date have been vetoed—things go smoothly. Gould, an Eastlake (Ohio) electronics maker, was proached by Nippon Mining Co., vetoed to first divest two sensitive

DOING A DEAL WITH FOREIGNERS? WHEN TO ALERT THE FEDS

IF YOUR COMPANY...

...has classified contracts with the Defense or Energy Depts., the National Security Agency, the CIA, or NASA

...has employees with security clearances for classified, secret, or top secret information

...is the last U.S. producer of an item that may become crucial to the defense industry

...does no defense business, but has cutting-edge R&D or products in superconductors, supercomputers, carbon fiber, lasers, or specialty semiconductors

...would be seen by the public as related, even indirectly, to the national security

DATA: TREASURY DEPT., MUDGE ROSE GUTHRIE ALEXANDER & FERDON

Even deals that CFIUS ultimately O.K.'s can become more difficult. Take Monsanto Co.'s sale of its silicon wafer division—the last U.S. maker of this basic semiconductor component—to West Germany's Heuls. Monsanto argued that silicon wafers are a commodity product. However, Sematech, a government-funded consortium whose mission is to boost the U.S. semiconductor industry, lobbied

evaporate," says a Defense Dept. source. So, CFIUS allowed the sale to Heuls.

CFIUS's job also extends to jaw-boning, just short of setting written conditions. CFIUS has held extensive conversations with foreign acquirers to encourage them to support U.S. research and development, to maintain domestic production, and not to export to the Soviets.

Wall Street also worries that CFIUS may snarl routine financing from abroad. If a U.S. company

borrows from foreign banks and then defaults, control can switch to the creditors. With more financing from foreign banks, this is a legitimate concern. Indeed, many high-tech deals, financed with venture capital, give debt holders control of the board in a default. Convertible debentures present a more nightmarish prospect: If enough foreigners happen to hold them when a company's success makes it profitable to swap them for common shares, control passes quietly into foreign hands.

MARCHING ORDERS. Finally, there is concern that CFIUS will be abused as the latest takeover defense. International Banknote Co., a New York company with classified contracts for its hologram technology, asked CFIUS to investigate when it was under proxy attack from a Japanese investor. CFIUS, without saying why, stood aside, as it did with a tulip-bulb grower, a swimming pool company, and a Maine timber owner. "One can expect companies under hostile attack to try, but our job is national security," says Stephen J. Canner, staff chairman of CFIUS and director of Treasury's Office of International Investment.

CFIUS was created in 1975 out of concern that Arabs were buying up too many U.S. companies. But all the committee could do was monitor and mutter. Now, CFIUS has its marching orders. It represents eight agencies and offices, including two heavyweights, Treasury and Defense. Although it has a staff of only six part-time Treasury professionals, CFIUS can tap the other agencies' resources. The panel has 30 days to decide whether to investigate a case and 45 days to make its recommendation. Then, the President has 15 days to act.

Treasury's Canner insists that CFIUS isn't out to discourage foreign investors. This "is still a picnic in comparison to buying a division in France," says banker Rona. But by brandishing the power to kill sensitive deals, CFIUS is putting the world on notice that even in America, some things are not for sale.

By Leah J. Nathans in New York

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Michael DeMartini, execu-

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lue, you are forced into a bit of a le," says DeMartini. Early last U.S. investment banker was try-sell a munitions unit that did 90% business with the U.S. Army to U.S. and foreign buyers. "This would tell the investment bank waste its time trying to find a buyer," says partner Stanley A. a lawyer at Mudge Rose Guth-xander & Ferdon.

to block the sale, with its chief executive, Robert N. Noyce, making a two-hour speech to CFIUS members. The Defense Dept. even offered to buy half the Monsanto division, but no U.S. company offered to buy the other half because it was unprofitable. "The issue was for Monsanto to close it or to sell it to someone who would build it up. CFIUS made the reasonable decision that it would be better to have it in stronger hands than

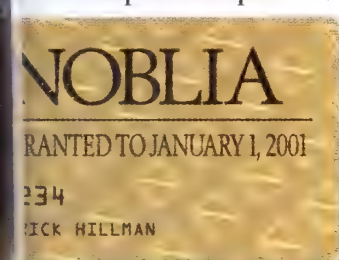
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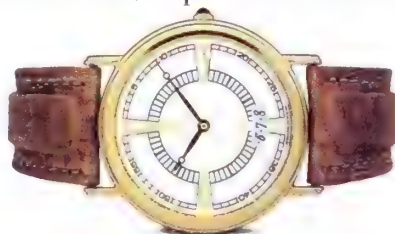
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SALOMON JUST CAN'T LOSE —IN TOKYO

It has faltered stateside—but it's on a hot streak in Japan



MAUGHAN AND
EQUITY SALES
DIRECTOR
SAKAMOTO
TOSHIMIDE

On Wall Street, Salomon Inc. is a slumbering giant. While bravely pressing forward into merchant banking and merger activities that it had previously neglected, this trading-oriented powerhouse has yet to regain its lost profitability. But in Japan, Solly has become Tokyo's largest and most successful foreign brokerage—and it's determined to stay at the top of the heap.

In contrast to the difficulties encountered by its parent, Salomon's wholly owned Asian subsidiary, Salomon Brothers Asia Ltd., has thrived in a notoriously tough environment. It's easily the most profitable U.S. brokerage in Japan—and has been for three straight years (table). The firm has seen its staff in Tokyo rise some 44%, to 500 employees, over the past two years. Salomon Asia Chairman Deryck C. Maughan, a former official at the Bank of England, predicts that the Tokyo office may hit 600 by the end of next year. Solly is the only U.S.-owned firm to have a permanent seat in the Japanese government bond syndicate. Some rivals carp that Solly is a token, chosen to succeed while other foreign brokerages falter.

Although charges of favoritism have been denied by Salomon and Japanese government officials, there's no doubt

that the firm has substantial local clout. One U.S. official notes that "Salomon is accorded that extra degree of respect and fear that Nomura is accorded on the domestic side," and that the Finance Ministry "never leaves Salomon out when it's considering something that affects the foreign sector." Salomon, in fact, is the lone foreign representative on the new Tokyo Financial Futures Exchange Committee, and the Finance Ministry recently asked the firm to take part in a group that will draw up standards for new financial products. To make sure that local relationships keep

running smoothly, Salomon has retained as advisers Sumio Hara, former director general of the National Tax Administration Agency and ex-chairman of the Bank of Tokyo, and Makoto Kuroda, a former trade negotiator.

Salomon's Tokyo triumph comes at a time when other foreign brokers have made little headway. Although 22 foreign firms have elbowed their way into Tokyo's bourse, they still claim only 4.5% of trading volume. Salomon Asia's trading of Japanese government securities, U.S. equities and Treasury bonds and more recently, Japanese stocks, has made it the sole American challenger to Japan's Big Four securities firms in Japanese government bond dealing, as Salomon trails only the top quartet—Nomura, Daiwa, Nikko, and Yamaichi. The firm's main money-maker is trading on its own account, but commission revenue is climbing.

'SCRATCHING THE SURFACE.' A big push in Japanese equities since Salomon joined the stock exchange a year ago has quintupled its Tokyo trading volume, to 400 million shares monthly or 29th among Japan's 269 securities firms. "I believe our equity business will be as big as our bond business," says Maughan. "We're just scratching the surface." Salomon's move into stocks is part of a response to the start of trading in Japan in equity-futures contracts and similar products in which Solly has extensive experience. Chief bond salesman Toshimaru Kojima, a highly regarded manager, is directing the venture into stocks.

Salomon's strength in Tokyo doesn't extend to the lucrative U.S.-Japan merger business. The firm sent a managing director to Tokyo last fall to put some fire into this area, but the results have been slim so far. According to Maughan, his people are only involved in "eight to ten modest transactions." Salomon's weakness in mergers and acquisition in America means that it is outside the real flow and has fewer ideas to take to Japanese clients. "We never run into them," says one U.S. merger specialist in Tokyo. "In fact, we bump into Japanese investment bankers more than we do Salomon."

Salomon Asia still has a long way to go before it can compete in every arena with the Big Four, especially Nomura Securities Co. But its strengths are not to be taken lightly—above all the carefully nurtured special relationship with the Japanese establishment. "I don't think the authorities would be disappointed if one or two foreign firms did well here," Maughan says. And if the past is a prologue, one of those firms is likely to be their old pal Solly.

By Ted Holden in Tokyo

SALOMON LEADS THE PACK IN JAPAN

JAPANESE PRETAX PROFITS*	Millions of dollars
SALOMON BROTHERS	\$53.0
GOLDMAN SACHS	12.7
FIRST BOSTON	7.2
MORGAN STANLEY	5.8
MERRILL LYNCH	1.0
PRUDENTIAL-BACHE	-0.2
SMITH BARNEY HARRIS UPHAM	-0.2
KIDDER PEABODY	-2.1
SHEARSON LEHMAN HUTTON	-7.0

*For six months ending Mar. 31

DATA: JAPAN ECONOMIC JOURNAL

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BY GENE G. MARCIAL

STRIDE RITE MAY SOON BE WALKING TALLER

When Stride Rite announced on May 1 that it was "amending" its shareholder-rights plan—a nice way of saying that it's making it tougher for anyone to raid or acquire the company—something unexpected happened. Instead of declining, Stride Rite jumped in the next two days from 40 to 43 a share. It now trades at 47.

Stride Rite, a leader in kids' shoes and casual footwear—notably the Keds and Sperry Topsider brands—says that nobody has expressed an interest in acquiring it. But the professionals have sniffed takeover blood and are scooping up shares. They may be on the right trail.

A New York investment group is expected to file a 13D and then seek clearance from the Federal Trade Commission to buy up to 15% of the 13.5 million shares outstanding, according to some big investors. Two influential institutions already own big chunks: FMR Corp., the holding company for Fidelity mutual funds and investments, has an 8.2% stake, and Citicorp's asset-management unit owns 7.8%.

The New York group made an offer last year for a sportswear company but lost out to a higher bidder. This time, says one Boston investment manager, the group is determined to go after Stride Rite, whose assets are estimated to be worth more than \$60 a share. The group, which started buying shares in January when the stock was at 26, now owns about 5%.

Steve Goldstein, a trading strategist at Knight-Ridder Financial Information, notes that from its trading pattern, Stride Rite stock is "very strong, with some high-volume days showing up in the past few months." There's nothing to indicate that its strength is likely to ebb soon, he adds.

Management's May 1 plan lowered the ownership threshold from 20% to 10%. At that point, Stride Rite's shareholder-rights plan is triggered. The plan gives stockholders—other than the entity acquiring 10%—the right to double their holdings. The betting among some pros is that Stride Rite will speed up its stock-buyback plan as part of its defense. In January, the board authorized the repurchase of 2.2

STRIDE RITE STOCK IS MOVING UP



million shares, but it hasn't bought any shares yet.

Even without a takeover, the stock still may be undervalued. Analysts are forecasting strong earnings. Estimates for 1989 range from \$3.10 to \$3.40 a share, and \$4 to \$4.40 for 1990, up sharply from last year's \$2.53.

To cut costs, Stride Rite last year shut down its money-losing Overland Trading unit, which sold adult footwear lines. And early this year, it unloaded the Herman workshoe division, another loser. The company has about 14,000 wholesale customers and also has 262 retail stores.

SITTING PRETTY AT LADD

With the economy slowing and the housing market slumping, it is no great surprise that the demand for furniture is in the cellar. Manufacturers have cut production, and profit margins have shrunk. Yet the stock of Ladd Furniture, one of the nation's largest furniture companies, is hitting new highs. The stock has climbed from about 14 in early April to nearly 18.

Management owns some 40% of the stock, so any takeover is remote. But the betting is that a leveraged buyout by management is in the cards. One takeover analyst estimates the private-market, or breakup, value of Ladd, a maker of wood, metal, and upholstered furniture, at \$26 a share. Management recently authorized the repurchase of an additional 1.5 million shares, or 8%.

Why would management do an LBO when it already has effective control?

One good reason is that the stock is cheap relative to the long-term prospects of the company, which has very little debt and a rising cash flow. Several big furniture makers have gone private through management-led LBOs. The deals were done at price-earnings ratios ranging from 20 to 27. Ladd's current p/e is 12. First Pacific Advisors, an asset-value investor, owns 5.6%, and Ruane Cunniff, another asset player, owns 2.7%. With these stakes, management could swing an LBO quite easily. A Ladd spokesman said management is examining several options, including an LBO, to get maximum value for its shareholders.

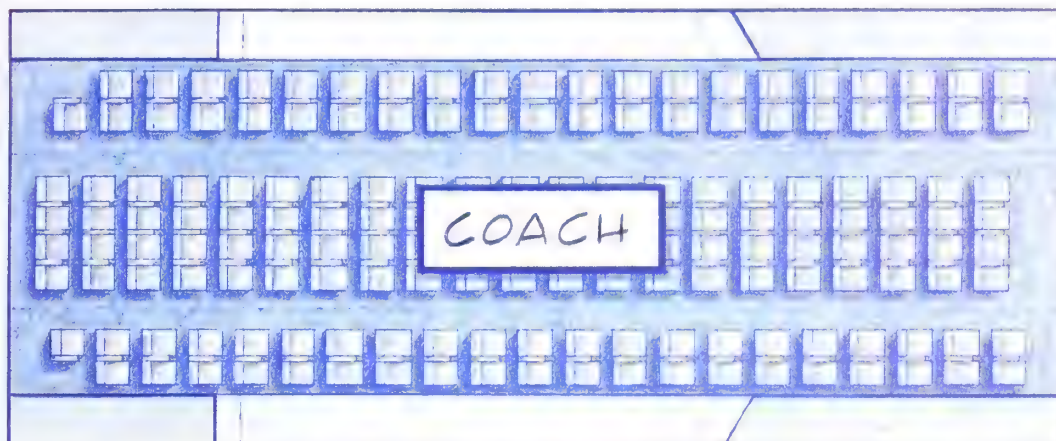
AN UNDERGROUND STOCK SURFACES

You may have missed the Environmental Protection Agency regulation issued last September requiring the testing for leaks of all underground fuel-storage tanks by 1993. But savvy Wall Street investors already see it as a gold mine for Arizona Instrument, a maker of microprocessor-controlled analytical instruments. The company's Soil Sentry, it's called, is specifically designed to measure underground contaminants such as leaks from gasoline tanks. "Our sensors are so sensitive that they detect leaks even before they get to serious problems," says President and CEO John Hudnall.

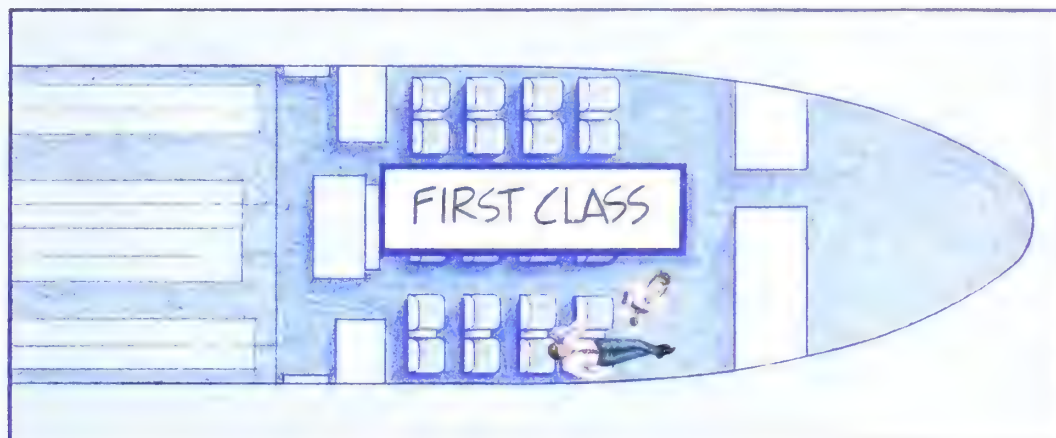
The EPA requirement is expected to force state and local governments to demand more stringent testing for underground leaks. Oil companies, airports, and the military are potentially big customers for Arizona. One big oil company and two military bases already have placed orders, says a source close to the company.

Arizona Instrument's sales "should rocket, starting in the third quarter of this year, with revenues hitting \$16 million in 1989 and \$25 million by the end of 1990," figures Steve Rabinowitz, managing partner at Boston's Cetera Partners, which has acquired a 5% stake. Sales in 1988 were \$10 million. This year, he expects the company to earn 50¢ a share and \$1.25 in 1990, a loss in 1988. Management owns 7% of the 2.2 million shares outstanding, making the company almost takeover-proof. But it could still be raided, because the stock is cheap and there are giants that could make alluring bidders," says one investor. The stock has risen from 6 to 8 during May.

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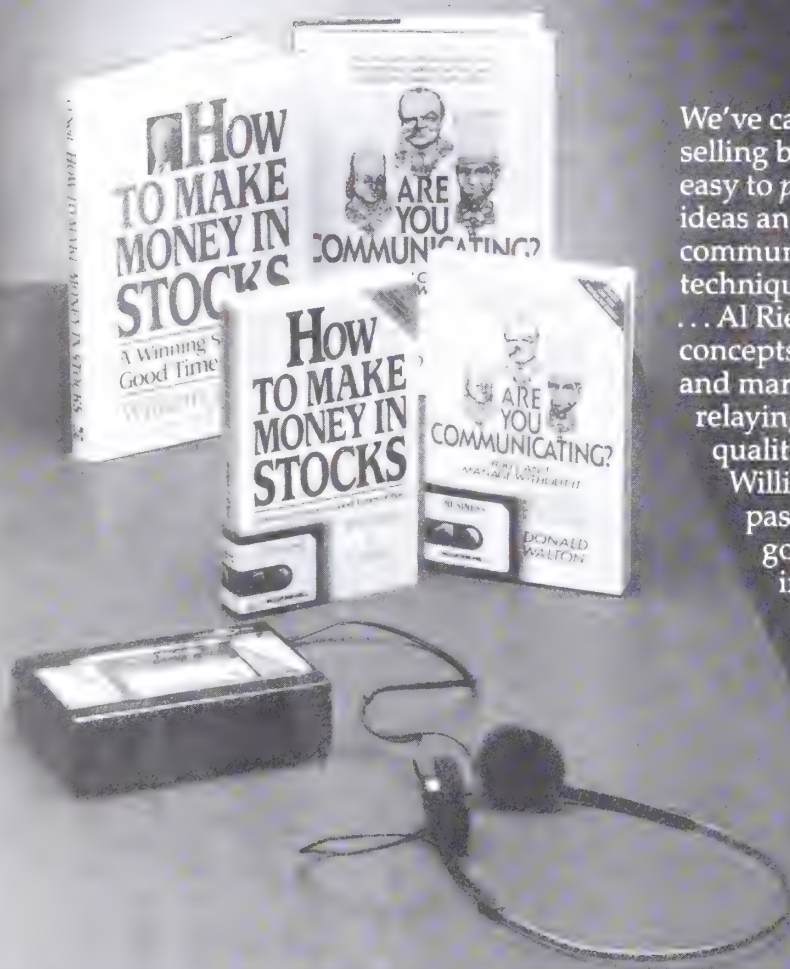
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AN CASSONI GET OLIVETTI OFF THE SLIPPERY SLOPE?

margins, profits, market share, and stock price are sliding—and 1992 looms

Round about 10:30 p.m., when Vittorio Cassoni finally gets back to his downtown Milan apartment after a typical 12-hour day running Olivetti, Europe's largest maker of personal computers and office equipment, he is to lose himself in a good Robert Ludlum thriller. "I was embarrassed to admit I liked Ludlum until I read that former U.S. Defense Secretary [Caspar Weinberger was a big fan," says Cassoni, stubbing out yet another Marlboro. These days, it's a wonder he has any time to read—or even smoke. In the years since Cassoni returned from an 18-month stint as head of American Telephone & Telegraph Co.'s computer operations, the 46-year-old executive has wrestled with one of the most daunting problems in Corporate Europe: revamping Olivetti to arrest a sharp drop in margins, profits, market share, and stock price. Last month, Olivetti, the flagship company of Italian industrialist Carlo De Benedetti, reported 1988 net profits of 254 million on \$6.1 billion in sales, a drop of 11% and way below the record 1987 million the group netted in 1986.

CRUSHING BARRIERS. Beyond its eroding margins, Olivetti faces graver challenges. The biggest is Europe's plan for a unified market in 1992. European computer makers such as Olivetti, IBM's Bull, and West Germany's Nixdorf Computer have been strong in their home markets, but weak in other parts of the Continent and outside Europe. They also lack the financial and technological clout of the leading U.S.-based makers, which have strong pan-European businesses. "None of our national champions is going to be able to stand up when the barriers come down in 1992," says Roberto Masiero, a former Olivetti executive who was head of IDC Italia, a market researcher. Until recently, Olivetti led the Continent's best efforts to stand up to U.S. and Japanese competitors. From 1984 to 1987, aggressive marketing made the



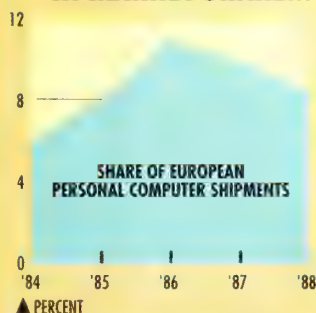
CASSONI: SO FAR, MIXED RESULTS FROM HIS RESTRUCTURING

company No. 2 to IBM in PCs in Europe. But Olivetti began having quality problems and was slow to add new products. That helped rivals such as Compaq Computer Corp. Last year, as Olivetti's 10% market share dropped by 1.5 points, Compaq's European sales leaped 150%,

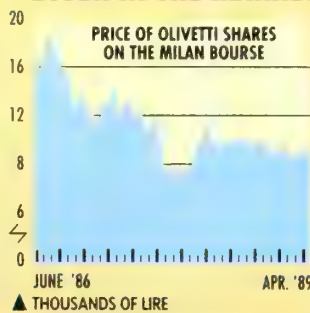
as they had identified as most promising would be to break Olivetti into three independent operating companies. Before the reorganization, monthly executive committee meetings "began with discussions of portable typewriters and went on to mainframes and copiers. It just didn't make any sense," recalls Cassoni.

Now, Olivetti's core \$2.5 billion office equipment businesses are lumped under Olivetti Office. This includes Olivetti typewriters, which retain a 40% share of the European market, and stand-alone PCs. Minicomputers and high-end PCs that run networks fall into Olivetti Systems & Networks. Olivetti Information Services handles sales of

OLIVETTI'S DIP IN MARKET SHARE...



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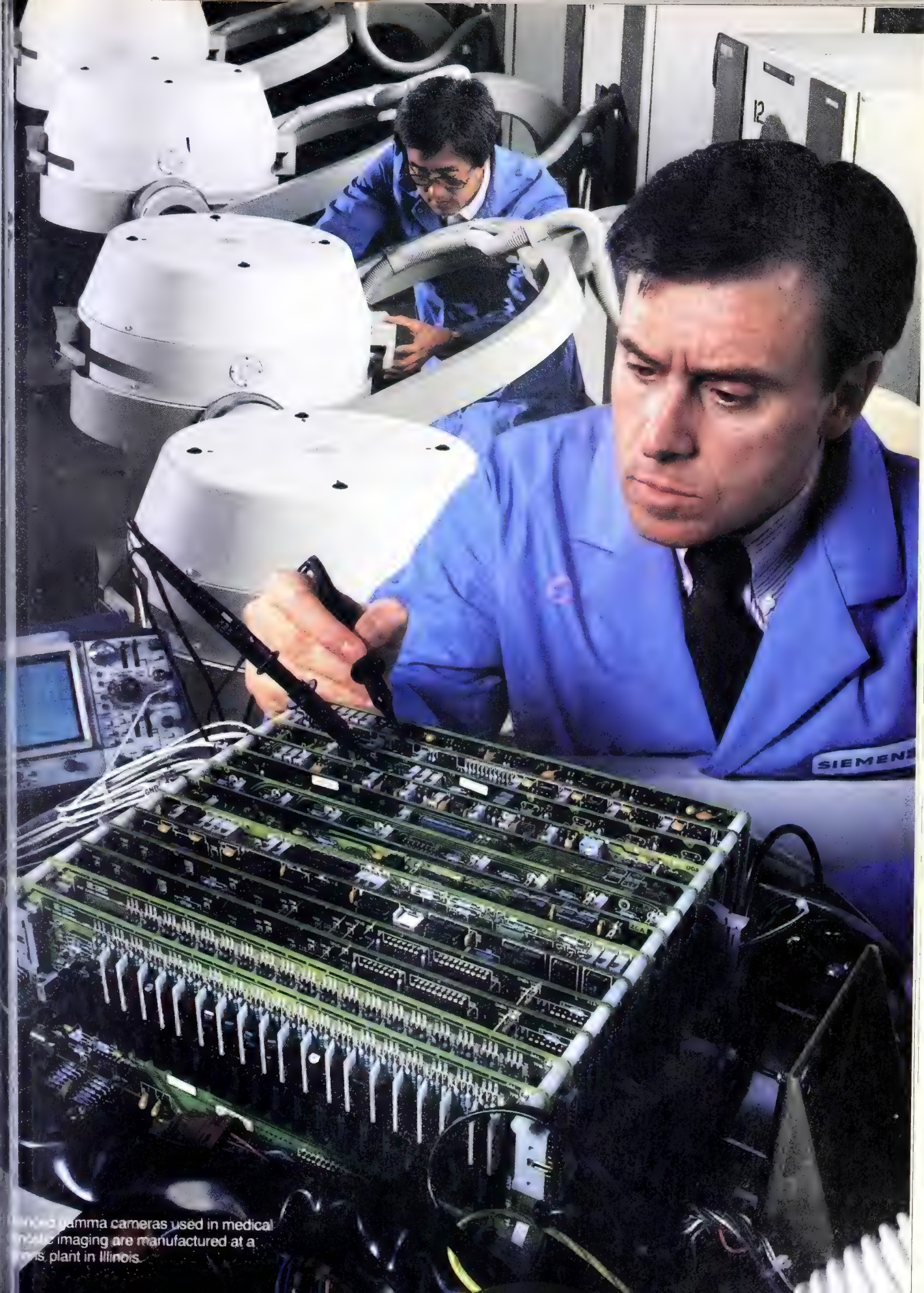


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software. Analysts note that the new structure makes it easy to break up Olivetti. And Cassoni says: "It is envisaged we would bring these companies public."

So far, the restructuring has had mixed results. After trailing competitors in the introduction of new technology, Olivetti in April brought out one of the first PCs to use the latest version of Intel Corp.'s 80386 microchip—a month ahead of Compaq. Cassoni also has brought out a clone of IBM's PS/2. "We frankly were late on key products," he says. "We've learned our lesson."

But Olivetti's minicomputer effort still seems to be running out of steam. Since the company spent \$500 million to bring out a new line of minis in 1987, its share of the European market has dropped from 3.4% to 3.2%. Partly, that reflects the dramatic growth of Digital Equipment Corp. in Europe. But another factor is that powerful microcomputers threaten to make minicomputers obsolete. Cassoni isn't yet giving up on minis, however. "In this industry, nothing goes to hell fast," he says.

One thing that has clearly improved since Cassoni took over is Olivetti's relationship with AT&T. The telecommunications goliath bought into the Italian company in 1983 and by 1986 was buying more than 200,000 Olivetti PCs a year for sale in the U.S. But by 1987, AT&T's marketing problems and Olivetti's product shortcomings cut the volume to 44,000, sparking some very public bickering between De Benedetti and AT&T Chairman Robert E. Allen.

Cassoni has helped patch up the rift, in part by fixing quality problems and producing new models. Now, AT&T says it plans to hang onto its 21% stake in Olivetti. Still, the commercial relationship has cooled. In April, AT&T disclosed that it is seeking a second PC supplier. Robert M. Kavner, president of AT&T's Data Systems group, says he's not obligated to stick with Olivetti: "If they have the right products with the right quality at the right price, they will be one of the vendors we buy from." And Olivetti has agreed to make PCs in Europe for AT&T rival Digital Equipment.

FAILED BID. Perhaps more serious than the rift with AT&T were the questions about De Benedetti's continuing commitment to Olivetti. The Piedmontese industrialist paid \$17 million for a stake in Olivetti in 1978 and then transformed the money-losing typewriter maker into an office-equipment colossus. But in recent years, De Benedetti has spent time away from Olivetti pursuing takeovers outside Italy. He also scored daring financial coups on various European bourses. Last year, he ran into trouble after pumping \$1.6 billion into a failed

bid for Société Générale de Belgique. That sparked rumors that he would lose cash by selling his 14% stake in Olivetti, perhaps to AT&T.

Now, De Benedetti says he's sticking with Olivetti for the long run. To underscore his commitment—and to forestall any move by AT&T to attempt a takeover or to sell its shares to someone else—De Benedetti spent \$110 million to buy Olivetti stock on the open market after Cassoni was named chief operating officer. Now De Benedetti's stake is roughly equal to AT&T's, and he's again spending two days a week at Olivetti's headquarters in Ivrea, 90 miles outside Milan. "I can guarantee you," says Cassoni, "that having \$1 billion invested in Olivetti, his attention level is now very, very high."

To Olivetti-watchers, the combination of De Benedetti and Cassoni signals more bold moves ahead. Cassoni, for example, considered the idea of moving

**'We frankly were
late on key products.
We've learned
our lesson'**

Olivetti's entire marketing operation to Paris to give it a more international look. He is also rumored to be considering a deal to license graphics technology from Steven P. Jobs's Next Inc. In Olivetti is expected to continue buying new businesses. It recently acquired Systems Corp., a Spokane (Wash.) maker of banking automation systems for \$174 million. With Bunker Ramo Corp. which Olivetti acquired in 1986, it gives the company a No. 2 position behind IBM in that U.S. niche market.

Will all the deals, the revamping, and Cassoni's widely acknowledged talent be enough to turn Olivetti around? Analysts say the bottom line could rebound next year, thanks to the reorganization and cost-cutting. But some companies say that more drastic action may be needed to ensure Olivetti's long-term health. It remains a diffused company selling everything from Hitachi miniframes to PCs, calculators, typewriters, even floppy disks—and trying to master a dozen technologies. "One thing I found out when I got back to Olivetti was that it's a good body, it reacts well and recovers quickly," says Cassoni. But to get the body into shape for the 1990s may require an even tougher workout.

By John Rossant and Thane Petersen
Ivrea, with bureau reports



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A HOT PHONE MAKER THAT COOLED OFF FAST

Investors loved IMM—but it isn't selling many phones

William J. Hilsman earned his telecommunications stripes setting up battlefield phones for the Army in Vietnam in the 1960s. Over the next 20 years, Major Hilsman rose to lieutenant general and head of communications for the entire U.S. armed forces. And when he retired from the Pentagon in 1983, his credentials opened a door.

Sherwin I. Seligsohn, a Philadelphia entrepreneur who ran a company called

months. None of this concerned IMM's hyperactive PR department, which treated each new expression of customer interest as a major order. Last September, for instance, BellSouth Corp. agreed to buy up to 8,000 Ultraphones, worth an estimated \$27 million, by the end of next year. So far, it has taken 32. Meanwhile, IMM is struggling to sell a version of its phone for the wider cellular market.

All of which has taken investors on a

year. Overseas, IMM has orders from India and Mexico.

But a lot of these orders are promises. The big phone companies committed to buying Ultraphones as they need them. And they have incentive to hurry. For one thing, there is no competition for local phone customers. And like most utilities, phone companies depreciate their network investment over long periods, sometimes setting back new installations for years. Hilsman has another diagnosis: "I have to use the term bureaucratic, but it's what [the phone companies] are." His goal is to sell 3,500 phones this year, break even by the fourth quarter. So far, he has shipped 370.

'NO WAY.' Further delays could imperil IMM as elephants such as Boeing and Rockwell International begin selling competing radiophones. Hilsman points out that his big ally is Hughes Aircraft Co., which builds Ultraphone. Even so, says Robert Geldmacher, manager of new-business development at Bell Atlantic Corp.'s Federal Systems Div., IMM is "the typical small company dealing in a large-company environment. They've got to noodle their way through."

This problem will worsen as the market pushes into mobile cellular equipment, dominated now by American Telecommunications & Telegraph, Northern Telecom, Motorola, and L. M. Ericsson. Concedes

Hilsman: "There's no question we can play in the large cellular market worldwide without a strategic partner. We will even sell an equity stake—if anyone is interested."

IMM's operating expenses doubled last year, to \$26.2 million, mainly to fund production for this year's far-unrealized surge in orders. Hilsman won't reveal his source of new funding, saying

million in working capital came from private placement at below-market prices. If this doesn't carry him through the third quarter, and if sales don't surge, he insists that he can go bankrupt. The well. IMM's backers, says Rosenblatt, are "high rollers... looking for another MCI, another Apple, another Xerox."

Hilsman has the old can-do Army attitude when he considers his predicament. "We're world leaders today," he says, "and damn it, I ain't going to lose it. Of course, the last time an American general said that was probably in Vietnam."

By Joseph Weber in Philadelphia
John J. Keller in New York



RETIRED LIEUTENANT GENERAL HILSMAN IS IN A BATTLE FOR SURVIVAL

International Mobile Machines Corp., had been developing a device called Ultraphone, which sends and receives calls via radio waves. He hired Hilsman as IMM's CEO, figuring that the general could sell the \$3,500 phone to the military and his old Baby Bell contacts: The phone companies could use the equipment in areas too isolated for regular phone lines. So much for that theory. Since 1986, IMM has lost \$42 million on revenues of just \$8.3 million, leaving it in a battle for survival. "This ain't easy," says Hilsman.

ROLLER COASTER. Bad timing, technical glitches, and a clumsy marketing strategy have plagued IMM. For instance, it wasn't until December, 1987, that the Federal Communications Commission designated special frequencies for radiophones in rural areas. Then IMM discovered technical bugs in Ultraphone that forced the suspension of sales for six

roller-coaster ride. IMM went public in 1981 at \$3, and by mid-1987 reached a high of \$16. But slow sales of phones—a third of last year's \$4.3 million in revenues came from providing communications training for the Army—have knocked IMM's shares down to 9¢. And there's heavy betting that the price will fall even further. Indeed, short sellers hold 3.4 million of IMM's 14.1 million shares. Says Sidney D. Rosenblatt, IMM's chief financial officer: "It's a very emotional stock."

Not that IMM has nothing to crow about. Southwestern Bell, U.S. West, and others have installed about 1,000 Ultraphones in 11 states and Canada. IMM estimates that demand in the U.S. from homes without phones or on party lines should support a market of \$1 billion a





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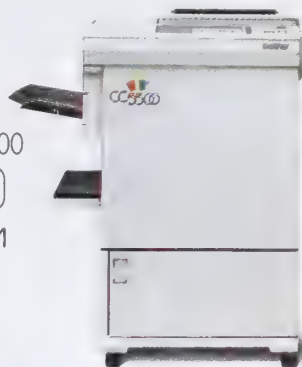
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YOU JUST MIGHT CLEAN UP WITH POLLUTION STOCKS

The Alaska oil spill. The greenhouse effect. The vanishing ozone layer. Public awareness about the environment is higher than it has been in years—and Wall Street knows it. So, don't be surprised if your broker starts pitching you pollution-control stocks. This mundane group is suddenly hot.

Merrill Lynch suggests pollution-control stocks in newspaper advertisements and direct-mail appeals to its customers, and Fidelity Investments is developing what could be the first mutual fund devoted to the stock group. The question for investors: Has the group already peaked, or is this only the beginning of a long bonanza for companies that specialize in cleaning up the messes that others leave behind?

'OPPORTUNITIES.' The four large stocks that make up the Standard & Poor's pollution-control index showed great gains from 1985 to 1987 (chart). But in 1988, as a group, Waste Management, Browning-Ferris Industries, Zurn Industries, and Rollins Environmental Services trailed the market. Then this April, they started surging again. Through May 24, the S&P pollution index was up 22.7%, bringing the cumulative increase since 1984 to 303%. "There are enormous growth opportunities in every sector of the business," says Marc Sulam, an analyst at Kidder, Peabody. "Over the next year, selected stocks will outperform the market."

Not everyone is that bullish for the short term. "The group has had such a big

move, and most of the stocks are trading at new highs. They're just too expensive for us now," says Harvey Eisen, president of Integrated Resources Asset Management. The average price-earnings ratio for a Kidder Peabody index of 20 pollution-control stocks is 21, vs. an average of 13 for the S&P 500.

Over the long term, however, many analysts believe that pollution-control stocks will do very well. The potential market for the industry's services is huge. With landfills running out of space, creative ways must be found to dispose of trash. In response to public concern, federal, state, and local governments

are spurring the industry's rapid growth with spending programs and regulations that require environmentally sound waste disposals.

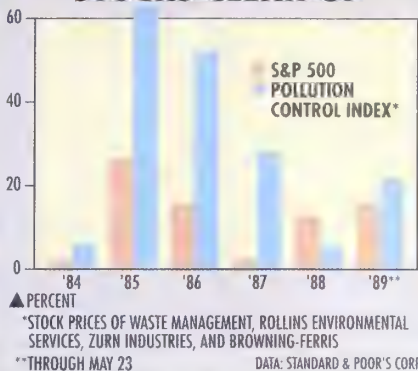
The problem for investors is that the industry is barely two decades old. Just a handful of companies dispose of household and industrial garbage. The vast majority of companies in this industry have sales in the range of \$50 million to \$200 million. And many of them have to operate in unpredictable areas such as asbestos removal and hazardous waste disposal and with experimental technologies for waste-fuel power plants.

PATIENCE. Buying into smaller companies is a risky proposition, particularly more so than with high-tech fledglings. Investors must be selective and patient, since earnings can be stalled by delays in regulatory approvals, breakdowns, litigation, not-in-my-backyard legal battles. Yet some analysts are betting on standouts, such as Edinburgh-based Chamberlain Development, a \$137 million solid waste disposal company that has grown an average of 78% over the four years, and Emco Associates, a \$35 million environmental engineering and consulting firm in San Francisco.

Investing in companies that specialize in hazardous waste is also tricky. The market for disposing of toxic chemicals and byproducts of the nuclear industry is estimated at much as \$5 billion a year. It is a dangerous business.



POLLUTION CONTROL STOCKS CLEAN UP



est and largest in the business and has averaged 30% earnings growth over the last 10 years. It owns the most landfill sites in the country. So with this much capacity, it benefits from the ongoing increases in tipping fees—the price it charges for accepting garbage from trash haulers.

As the industry continues to consolidate because of increasing regulations and costs, Waste Management has the financial muscle to acquire small disposal companies and absorb municipal processing operations that

want out. The company is a leader in the trend toward full service, taking on all kinds of pollution control, including hazardous waste through its 81% ownership of Chemical Waste Management (which in turn owns 49% of The Brand Cos., an asbestos removal specialist that Goldman Sachs likes).

Dealing with past pollution alone could keep companies humming. Asbestos removal is a \$2.5 billion business, and it's growing about 40% a year. And, as long as people continue to put more pollution into the environment, at least some of the clean-up companies could become, well, filthy rich.

Leah Nathans

Planning

THIS POLICY TAKES THE STING OUT OF INHERITANCE TAXES

written for two partners in a business, for example, with their children as beneficiaries. When the second partner dies, the money can defray the cost of inheritance taxes—without starving the business.

Since an insurer has to set reserves aside for only one death-benefit payment, rather than for two separate ones, the premium cost is low. It's roughly 50% or 60% of what two people would pay to purchase the same amount of individual whole-life coverage.

Yes, it's possible that the two insured people might die together in, say, a car or plane crash. But insurers know the odds are against it. Says Welch: "If the probability is 1 in 100 that one party will die at a certain age, the probability that both will die at the same time is 1 in 10,000." Taking age disparities into account, premiums are set according to the couple's "joint equal age," with allowances made for

such factors as pairing smokers and nonsmokers.

One couple, aged 67 and 68, recently bought a \$10 million survivorship policy for \$200,000 a year, says Edward Graves, American College associate professor of insurance. In contrast, a 68-year-old male smoker would pay about \$150,000 to buy \$10 mil-

lion worth of one-year term insurance just for himself. At New York Life, which introduced a survivorship program in March, the first sale was an \$18 million policy. Its cost, "about \$300,000" annually, says Welch, "isn't much when you figure the expenditure preserves one-half of an estate worth \$37 million or so."

To lower premiums, policies sold by Northwestern Mutual Life and New England Mutual Life, among others, let buyers include some inexpensive decreasing term insurance with the higher-priced whole-life coverage in the initial

years; later, the whole-life dividends help pay the premiums and boost the death benefit.

When real estate or a family-owned business is part of the inheritance package, having immediate cash available from a survivorship policy can be particularly valuable. "Otherwise, in some instances, the business might have to be liquidated or property sold to pay the taxes," says Graves. "Or take a case where two sons inherit the business and split on keeping it going. One could use his half of the insurance proceeds to buy out the other's interest in the company." *Don Dunn*



Smart Money

A SEXY NEW TAX SHELTER FROM ACROSS THE ATLANTIC

Demand for municipal bonds has pushed yields to a two-year low. If that makes them too expensive a tax shelter, consider new issues of British preferred stock. Thanks to a happy combination of factors in the British security laws and the American tax code, individual investors on this side of the Atlantic fork over only an 11% tax on the dividends from these newfangled issues, instead of as much as 33% on dividends that they receive from American corporations.

The first of these issues will soon be available. So far, BET and Barclays are offering stock, with an issue from Allied Irish Banks in the wings. BET, a large service conglomerate with about \$3.2 billion in sales last year, will float 200 million shares. Barclays will offer 275 mil-

The tax bite on these British issues comes out to only 11%

lion shares. Neither company has established the prices of their shares yet. But the shares will all be denominated in dollars to please American investors. That means the dividend won't fluctuate with changes in the pound. Robert Willens, an accounting expert at Shearson Lehman Hutton, says that as many as a dozen more issues, in the form of American Depositary Receipts (ADRs) listed on the New York Stock Exchange, could follow.

TWICE BLESSED. When a British corporation pays a dividend, it pays the British government an Advance Corporation Tax (ACT) equal to

one-third the amount of the dividend. But the American recipient of the dividend is allowed a refund of the ACT. Better yet, the American investor is also entitled to a foreign tax credit, for British taxes withheld, to offset U.S.-levied taxes on the dividend.

For example, here's how the math works out for a 7.5% dividend on a hypothetical \$100 unit. With the \$2.50 refund from the ACT, the American shareholder gets \$10, on which the British withhold 15%. That \$1.50 is credited against the \$3.30, or 33%, that American taxpayers pay in the top bracket. That leaves the American individual shareholder with \$6.70 in his pocket out of a \$7.50 dividend, or nearly 90%. The gross yield on the issue from Barclays is 11.12%—a spread of about 50 basis points over similarly rated American bank stocks.

FLUCTUATION SHIELD. The cost of entry is the same commission that your broker charges for American stocks. What's in it for the British? Access to fresh capital that won't dilute the common equity of the shareholders. The preferred stock isn't considered true equity there, because it's not convertible and, in the case of the Barclays issue, it can be called at the company's option after five years.

Analysts expect many subsequent issues to be bank stocks. It's one way for the banks to build capital to comply with new international standards and shield that base against fluctuations in currencies.

A word of warning: No matter how neat the tax advantages, remember you are buying shares in a company. Make sure you want to be an owner.

Laura Jereski



DRIVING HOME A POINT AT A SKIP BARBER CLASS

Leisure

A SCHOOL WHERE YOU PASS THE TEST AT 125 MPH

Rush hour has been hell. Inching along at speeds your arthritic dog could easily match, you dream of opening it up. If Paul Newman and Tom Cruise can zoom around a track on their free weekends, why can't you?

Well, you, too, can be an amateur racer, hurtling into the curves at a local track at speeds approaching 125 mph. But before you do, it's best to attend one of the several racing schools around the country. The biggest is the Skip Barber Racing School. Based in Canaan, Conn., Skip Barber uses 16 tracks nationwide, from Riverside, Calif., outside of Los Angeles, to West Palm Beach, Fla. The school provides the cars, mechanics, instructors, and equipment.

SPECIAL FORMULA. A three-day course at Skip Barber costs \$1,600. The school also offers one-day programs for \$250 and "corporate days" for groups. But at the end of the three-day course, you'll be certified for competitive amateur racing. Then, you could shell out \$25,000 for one of those tiny, high-powered Formula Fords that many amateur tracks use. A better bet is to attend some of the school's weekend races. They

cost about \$1,000 per weekend, including use of a car.

At the three-day Skip Barber course, you'll get a full of classroom lectures on such topics as locating the apex of a curve and the strategy of downshifting in curves. But the real fun comes when you're racing around the track.

You'll practice negotiating hairpin turns using the heel maneuver, a modified double-clutching technique that consists of slamming the brakes and downshifting all at once. Instructors are everywhere, flagging you or giving you pep talks or pointing at you for not going enough into the curves.

A practice run on the 2-mile Riverside track, with nine curves and two straightaways, is the payoff. A speed around, gliding from the outside to the inside of the track in search of the shortest line between the curves. With each lap, confidence grows and you go faster and faster. On the last lap, you roar into the banked curve at top speed. You hurtle out of the corner onto the straightaway, barrel across the finish line at 105 mph. Now that's an hour.

Eric



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Dining

NEW FRENCH FARE: VIVE LA REVOLUTION

With France's bicentennial approaching fast, it's only fitting that another revolution is well under way. And it concerns something the French are even more passionate about than politics: food. Several upstart restaurants are challenging the country's old gastronomic temples with a new cuisine that emphasizes lighter preparations, high quality—and more down-to-earth prices.

Leading the vanguard is José Lampreia, a 35-year-old Portuguese immigrant who's making his mark in Paris at La Maison Blanche (82 Boulevard Lefebvre; phone number: 48-28-38-83). For a prix fixe of about \$40, you can sample a savory mix of regional dishes cooked up with an unusually light touch.

Lampreia starts with simple fare such as his favorite—potato puree—and does wonders with it. Try the *gâteau landais*, a *feuilletée* of potatoes interleaved with thin slices of *foie gras*. Another rewarding choice is cabbage stuffed with oysters. Desserts at La Maison Blanche are among the best in Paris. If you have time to wait for the special preparation, hold out for the fondant with white chocolate ice cream.

THE NEXT BOCUSE? Another rising star is Philippe Groult, 36, an engaging Norman who got his start at 13 as a busboy in a Paris airport restaurant. Groult's career took off when he met Joël Robuchon, whose Paris restaurant, Robuchon, is arguably the best in the city. Robuchon put him to work behind his stoves for 10 years, and Groult is now emerging as France's next Paul Bocuse.



PARIS' LES CHANTS: HEAVENLY FOOD AT DOWN-TO-EARTH PRICES



Groult has a knack for bringing out the true flavor of a dish, whether it's his rich terrine of *lapin* (Groult breeds his own rabbits) or his caramelized lemon fondant. His real test will come in a few weeks, when he opens his first restaurant in Paris. It's called Amphyclès, after a cook in ancient Greece renowned for his unpretentious but superb cuisine. Lunch at Amphyclès (78 Avenue des Ternes; 45-74-31-57) will cost about \$50, including wine.

Chef Michel Derbane's restaurant Les Chants du Piano (10 Rue Lambert; 42-62-02-14) offers one of the better values in town. Derbane concocts such unusual yet tasty dishes as a Sauternes-sprinkled sorbet of *foie gras* and lobster-filled medallion of rabbit. At about \$25, lunch is a bargain. The restaurant also has an excellent wine list.

For a relaxing weekend outside Paris, head out to Chef Patrick Pagès' one-star restaurant/hotel called Chantoiseau (Pont-de-Montvert, Vialas (Lozère); 66-41-00-02). It is tucked away in the remote Cévennes mountains in southern France. Known as the "retreat of the warrior," Chantoiseau is set in a charming 17th-century former relay station, in the village of Vialas, about 400 miles from Paris. The meals that Pagès cooks up for his guests almost upstage the gorgeous surroundings.

Pagès offers more than a dozen seasonal menus with such offbeat entrées as trout-filled blinis and fricassee of frog. Mushrooms hold a special place in Pagès' cooking. There are a dozen different varieties in the region, such as the rare and exquisite *girolle* and *morille*. The restaurant has a special nine-course menu, where each dish is prepared with a different variety of mushroom. Pagès' masterpiece is his "10 courses, 10 wines prestige" menu. It's so elaborate that it must be ordered a few days ahead of time. Here, too, the price is reasonable—less than

\$100 per person for the three-course menu. For a more remote location, Pagès has a steady clientele that includes French President François Mitterrand and former German Chancellor Willy Brandt. The restaurant is accessible by helicopter or by train through 110 tunnels as it winds up the mountains. Hotel rates run around \$40 a night; there are only 15 guest rooms, so make reservations early.

Pia Fier

Worth Noting

■ **ON AND UNDER WATER.** For visitors to Manhattan, the Sea-Air-Space Museum at Pier 86 boasts a new exhibit, *The Growler*, the first U.S. submarine to carry missiles. It is now moored alongside the mammoth World War II aircraft carrier, *Intrepid*. Both ships are open daily through Labor Day (212 245-0072).

■ **THE BEAT GOES ON.** The top-of-the-line personal stereos (\$235 to \$290) from *Audio* boast built-in lead-acid batteries: They allow 2½ hours of cassette play on a 15-minute charge. And teamed with two alkaline AAAs, they run for 12 hours of steady playback.



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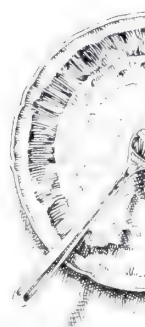
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please, we need you to help.

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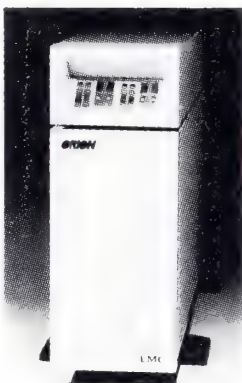
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NEC Business Communication Systems (West), Inc.

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213 204-6500

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Maggie,
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as much
as Jim’s.”*

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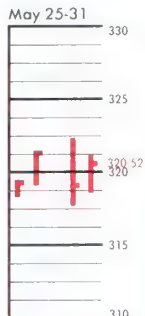
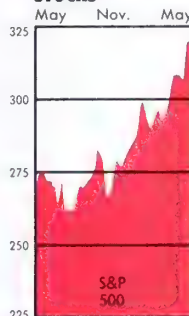
The  Alliance
An Alliance of Blue Chip Companies

Investment Figures of the Week

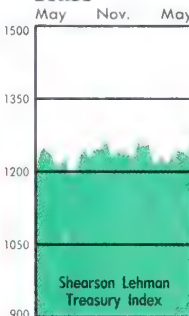
MARKET COMMENTARY

Stock market took a breather last week, after climbing most of the week. But the damage was mostly done to big-name stocks. Of the major indexes, only the Dow Jones lost a point. Small companies, however, rose in the most recent rally, with some strong gains, up 1.1% for the week. Tokyo and other foreign stocks also moved up by more than 1%. The dollar, which had been under pressure and dropped during May, came under pressure and dropped during May. Yields on short-term T-bills fell up 0.2 percentage points.

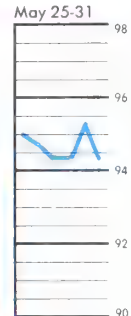
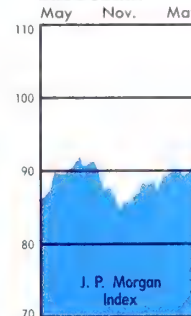
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	2480.2	-0.1	20.2
COMPANIES (Russell 1000)	169.9	0.6	20.4
COMPANIES (Russell 2000)	171.5	1.2	20.1
COMPANIES (Russell 3000)	182.5	0.6	20.4

FINANCIAL STOCKS

	Latest	% change Week	% change 52-week
DOW JONES FINANCIAL TIMES 100	2114.4	-0.9	17.1
NIKKEI INDEX	34,266.8	1.2	23.7
TSE COMPOSITE	3707.4	1.1	13.0

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.9%	8.7%	6.7%
30-YEAR TREASURY BOND YIELD	8.6%	8.6%	9.1%
S&P 500 DIVIDEND YIELD	3.3%	3.4%	3.6%
S&P 500 PRICE/EARNINGS RATIO	12.5	12.5	14.2

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	294.2	292.2	Positive
Stocks above 26-week moving average	68.6%	68.5%	Neutral
Speculative sentiment: Put/call ratio	0.22	0.22	Negative
Insider sentiment: Vickers sell/buy ratio	1.66	1.63	Positive

INDUSTRY GROUPS

WEEK LEADERS

	% change 4-week	% change 52-week
RESTAURANTS AND HOTELS	17.3	45.9
TELECOMMUNICATIONS	13.8	5.2
ENGINEERING AND CONSTRUCTION	12.7	35.6
BUILDING	12.2	56.6
INDUSTRY	11.2	45.0

Strongest stock in group

HILTON HOTELS
MOTOROLA
FLUOR
PHM
HASBRO

BRIDGE INFORMATION SYSTEMS INC.

WEEK LAGGARDS

	% change 4-week	% change 52-week
GLASS CONTAINERS	-5.0	17.3
MINING	-3.6	-6.5
STEEL	-3.4	23.3
MENTATION	-3.1	0.6
TOOL	-1.6	-2.0

Weakest stock in group

CROWN CORK & SEAL
NEWMONT MINING
ASARCO
HEWLETT-PACKARD
CROSS & TRECKER

	% change 4-week	% change 52-week	Price
HILTON HOTELS	30.4	86.9	82
MOTOROLA	20.0	19.7	54 3/4
FLUOR	16.9	58.3	28 1/2
PHM	22.2	164.0	16 1/2
HASBRO	15.4	37.5	20 5/8

MUTUAL FUNDS

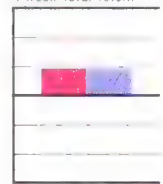
	%
4-week total return	%
MAN OCEANOGRAPHIC TECHNOLOGY	11.4
SANDERS SPECIAL	9.9
WELL EMERGING GROWTH	9.6
52-week total return	%
MAN	67.4
FARE GROUP TREND	51.7
GENA GROWTH	51.5

LAGGARDS

	%
4-week total return	%
UNITED SERVICES GOLD SHARES	-8.3
STRATEGIC INVESTMENTS	-7.2
COLONIAL ADVANCED STRATEGIES GOLD	-6.5
52-week total return	%
STRATEGIC INVESTMENTS	-24.5
STRATEGIC GOLD/MINERALS	-23.6
FINANCIAL STRATEGIC GOLD	-20.1

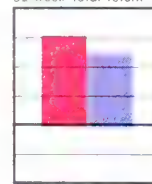
S&P 500

4-week total return



Average fund

52-week total return



RELATIVE PORTFOLIOS

	U.S. stocks	Treasury bonds	Foreign stocks	Money market fund	Gold
Investment	\$12,496	\$11,831	\$11,422	\$10,683	\$8,058
at the present					
\$10,000					
one year					
each portfolio					
es indicate					
total returns	-0.91%	+0.74%	-0.68%	+0.18%	+0.65%

This page is as of market close Wednesday, May 31, 1989, unless otherwise indicated. Funds include S&P 500 companies only; performance and share prices are as of market close.

May 30. Mutual fund returns are as of May 26. Relative portfolios are valued as of May 30. A more detailed explanation of this page is available on request.

NATO DEFENSE CUTS: PLAN FOR THE PAYOFF

President George Bush's proposal for deep cuts in conventional forces in Europe has a far-reaching corollary: the prospect of big savings, later if not sooner, in overall U.S. defense spending. After all, 60% of the \$305 billion annual U.S. military budget is dedicated directly or indirectly to the defense of Europe, the focus of the East-West conflict for 40 years. A cut in conventional forces in Europe by both sides will greatly reduce the threat of a Soviet armed attack against Western Europe. That will allow the U.S. to make even bigger reductions in overall defense spending, beyond the specific cuts in Europe that are envisioned in Bush's plan (page 22). As the threat of Soviet conventional forces diminishes in Europe, Washington can begin looking for more ways to wind down the U.S.-Soviet arms spiral.

Bush has scheduled strategic arms reduction talks (START) with the Soviets, beginning on June 19, to negotiate further cuts in nuclear weapons. Now he must lose no time in launching yet another major multilateral defense review focusing on how reduced superpower tensions can be most effectively translated into concrete budgetary savings. If the Bush Administration does not take the initiative on this issue, Congress, strongly backed by public opinion, certainly will. The growing climate of détente is not likely to allow the President the luxury of waiting for the final outcome of either the Vienna talks or the Start negotiations before starting to plan for slimmed-down U.S. armed forces and reduced spending on weapons and military research.

Barring an abrupt shift toward more hostile policies by Soviet President Mikhail S. Gorbachev, the American people and Congress will rightly conclude that some of the hundreds of billions of dollars that the U.S. has been pouring into defense every year can now be better used to meet other urgent needs to invest in our human capital, from education and combating drugs to shrinking the budget deficit. There are going to be job dislocations if the defense cutbacks are major, and some of the savings are going to have to be spent on retraining displaced workers. The allocation of limited budget resources should correspond to these changing priorities.

CONGRESS, CLEANSE THYSELF

Whatever else his almost certain elevation to House Speaker brings, Majority Leader Thomas S. Foley (D-Wash.) is no Jim Wright. He is cautious and thoughtful, where Wright was brash and abrasive. Foley is judicious and honorable, where Wright had a gaping ethical blind spot. For all House members who fear that the strict ethical accountability sweeping the Capitol right now could cost them their seats, a leader with those qualities will offer

reassurance that Congress can put its house back in semblance of order.

But before the lawmakers get too complacent, they will be wise to heed the new moral climate on Capitol Hill—act accordingly. House and Senate task forces on ethics reform are expected to issue their recommendations shortly. And change is needed urgently. Congress should move away from the kingdom of brazen self-interest where legislators exempt themselves from the laws they impose on others, where special interests shamelessly shower the power with campaign contributions and honoraria.

The House and Senate should act swiftly on legislation that would bar lawmakers from becoming lobbyists for one year after they leave office. And while they are at it, the legislators should close the loophole that allows members elected before 1980 to convert their leftover campaign contributions to personal use when they retire. The ethics task forces also should call for an end to speaking honoraria in exchange for a 25% pay raise for House and Senate members. Despite the lapses of a few, the lawmakers as a whole deserve it, just as the public deserves a Congress that is not legally on the take all the time.

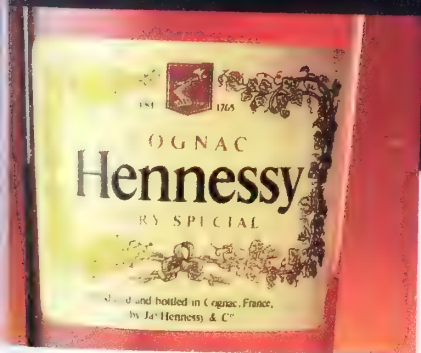
PUT THE S&Ls ON A SHORT LEASH

It's sickening. At a time when the official estimate of the cost to the American taxpayer of bailing out the savings and loan industry ranges up to a high of \$285 billion, the industry's lobbying arm is badgering Congress to gut ethics reform. The centerpiece of the Bush Administration's reform plan for the thrifts is to beef up the industry's annual capital requirements—now much lower than those required of commercial banks. Capital is the bedrock of any financial institution, and over the years, Congress has heeded the industry's plea to dilute capital requirements until they now include such things as goodwill, which won't buy you a cup of coffee.

If the industry pitchmen in Washington get their way, the taxpayers will be anteing up billions of dollars every couple of years to pay for the mistakes of irresponsibly margined thrifts. Despite the appearance of reform, nothing will change. What is needed is more financially sound institutions with deeper pockets, not marginal operations flying by the seats of their pants. By letting the people who caused the problem have their way, Congress will only make things worse.

We couldn't agree more with famed investor Warren E. Buffett, whose Berkshire Hathaway Inc. owns Mutual Shares & Loan Assn. of Pasadena, Calif. Disgusted with the U.S. League of Savings Institutions' lobbying campaign on the Hill, Buffett's thrift withdrew from the group when it learned of the group's parting blast that we think sums up the situation: "It is unfair to liken the situation now facing Congress to cancer, and to liken the league to a significant carcinogenic agent. And, like cancer, our present troubles will recur if Congress lacks the wisdom and courage to excise elements which helped cause the troubles." To that we say Amen.

I've been called a lot
of things in my life.
My favorite is Dad.



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She also doesn't realize Hewlett-Packard makes PCs



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BusinessWeek

JUNE 19, 1989

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CHINA

The Great Leap Backward

PAGE 28



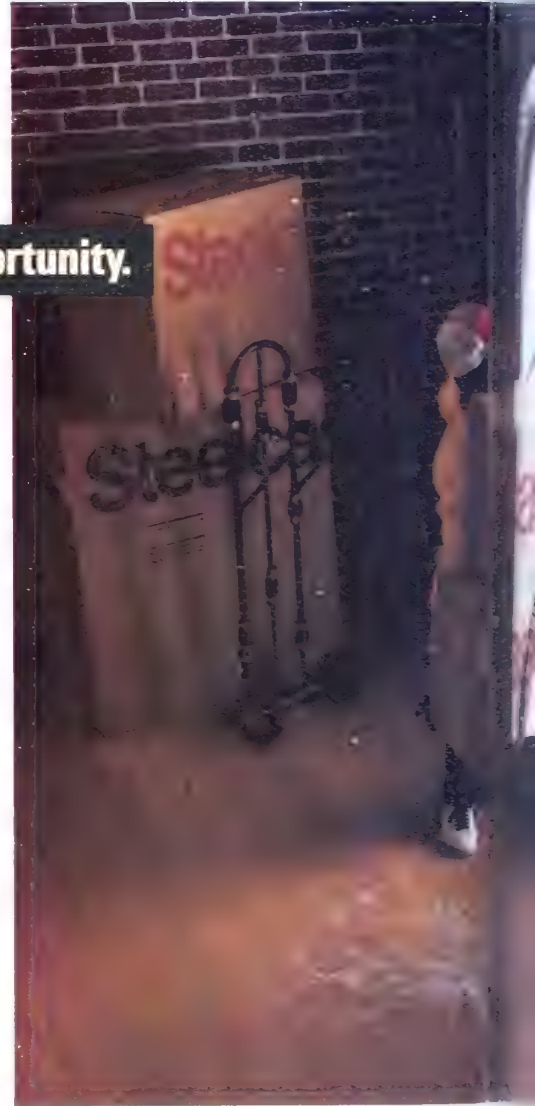
About three years ago, to preserve a local landmark, Eastman Kodak Company bought an empty, 107-year-old seminary, just a stone's throw from their largest manufacturing site in Rochester, New York.

Soon afterward, they decided to put a research and development unit into the top floor. The problem was, there was no effective way to get anything bigger than a seminary student into the building. No loading docks. No elevators. And three-story stairwells too twisty to hike any furniture up.

So, Kodak called on John Donohue of Merkel-Donohue, their full-service Steelcase™ dealer in Rochester, with 70 employees and 25-years' experience. Donohue and the Kodak people put their heads together.

"John, it's going to be a challenge."

Window of opportunity.



“Challenge?
We’re going to
need a shoehorn!”



The best approach, they decided, was to jury-rig an outside elevator. They took out a third-story bay window. Built a scaffold. And rolled a giant crane over from Kodak. Steelcase’s deliveries were coordinated so that as furniture arrived, it was unloaded, hoisted up to the scaffold, and moved in through the window.

Working together, Merkel-Donohue, Kodak, and Steelcase managed to deliver three huge trailers’ worth of furniture—Series 9000, plus chairs, files, the works. Enough for 40 offices and several conference rooms. In one day.

One long, late-November day.

In a blizzard.





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Because today isn't yesterday.



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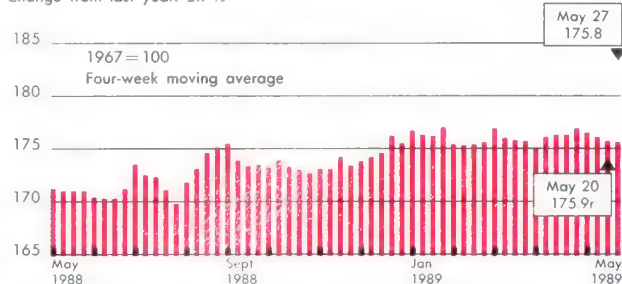
Kick inflation—even when it's down

Busting a monopoly at Antitrust

BusinessWeek Index

PRODUCTION

Change from last week: -0.1%
Change from last year: 2.7%

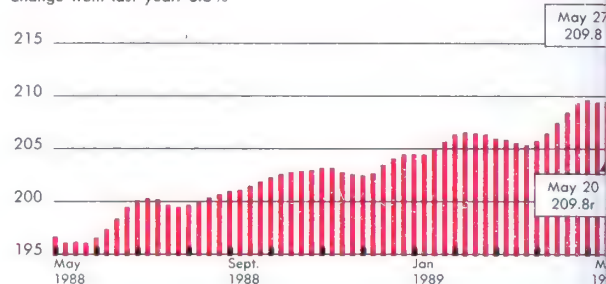


The production index was nearly flat for the week ended May 27. On a seasonally adjusted basis, this week's output of electric power, paper, trucks, lumber, and crude-oil refining increased. Production of autos, rail-freight traffic, paperboard, and coal declined. Output of steel was unchanged for the week. Prior to calculation of the four-week moving average, the index rose sharply to 177.5 from 174.8 for the week before.

BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: 6.8%



The leading index was basically unchanged for the week ended May 27. A sharp decline in the growth in materials prices offset the positive signs given by higher stock prices, lower bond yields, faster growth in M2, and a drop in the number of business failures. The change in real estate loans was down slightly for the week. Before calculation of the four-week moving average, the index dropped 210.6 from 211 in the previous week.

Leading index copyright 1989 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (6/3) thous. of net tons	1,920	1,954 #	-2.8
AUTOS (6/3) units	122,695	148,363r #	-11.6
TRUCKS (6/3) units	72,377	85,907r #	0.0
ELECTRIC POWER (6/3) millions of kilowatt-hours	54,123	54,702r #	6.2
CRUDE-OIL REFINING (6/3) thous. of bbl./day	13,924	13,733r #	0.8
COAL (5/27) thous. of net tons	18,593 #	18,896	3.2
PAPERBOARD (5/27) thous. of tons	735.2 #	736.4r	-2.3
PAPER (5/27) thous. of tons	739.0 #	713.0r	2.6
LUMBER (5/27) millions of ft.	487.5 #	484.0	-6.6
RAIL FREIGHT (5/27) billions of ton-miles	19.7 #	19.8	0.5

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/7)	142	143	125
GERMAN MARK (6/7)	1.97	1.99	1.72
BRITISH POUND (6/7)	1.58	1.57	1.82
FRENCH FRANC (6/7)	6.68	6.74	5.79
CANADIAN DOLLAR (6/7)	1.20	1.21	1.22
SWISS FRANC (6/7)	1.70	1.72	1.43
MEXICAN PESO (6/7) ³	2,481	2,472	2,300

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/7) \$/troy oz.	374.200	361.800	-18.3
STEEL SCRAP (6/6) # 1 heavy, \$/ton	118.00	114.50	8.3
FOODSTUFFS (6/5) index, 1967=100	222.9	226.6	-6.9
COPPER (6/3) ¢/lb.	117.8	116.2	10.5
ALUMINUM (6/3) ¢/lb.	95.0	96.5	-26.4
WHEAT (6/3) # 2 hard, \$/bu.	4.37	4.46	25.6
COTTON (6/3) strict low middling 1-1/16 in., ¢/lb.	64.26	62.47	-2.2

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (6/2) S&P 500	321.77	320.04	
CORPORATE BOND YIELD, Aaa (6/2)	9.37%	9.41%	
INDUSTRIAL MATERIALS PRICES (6/2)	103.7	104.4	
BUSINESS FAILURES (5/26)	250	254	
REAL ESTATE LOANS (5/24) billions	\$325.2	\$324.6r	
MONEY SUPPLY, M2 (5/22) billions	\$3,081.2	\$3,075.0r	
INITIAL CLAIMS, UNEMPLOYMENT (5/20) thous.	303	326	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), D. Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
EMPLOYMENT, CIVILIAN, MILLIONS, (May)	117.2	117.1	
UNEMPLOYMENT RATE, CIVILIAN (May)	5.2%	5.3%	
PURCHASING MANAGERS' INDEX (May)	49.7%	53.0%	
CONSTR. SPENDING (Apr.) annual rate, billions	\$414.9	\$414.6r	

Sources: BLS, National Association of Purchasing Management, Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/22)	\$772.5	\$773.0r	
BANKS' BUSINESS LOANS (5/24)	316.4	316.9r	
FREE RESERVES (5/31)	639	329r	
NONFINANCIAL COMMERCIAL PAPER (5/24)	122.9	123.1	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in millions).

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (6/6)	9.58%	9.77%	7.0%
PRIME (6/7)	11.00	11.50	9.0%
COMMERCIAL PAPER 3-MONTH (6/7)	9.03	9.31	7.0%
CERTIFICATES OF DEPOSIT 3-MONTH (6/7)	9.25	9.55	7.0%
EURODOLLAR 3-MONTH (5/31)	9.50	9.46	7.0%

Sources: Federal Reserve Board, First Boston

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Chairman: Frank A. Well
Chairman and CEO, Abacus and Associates

How will public sector activity in the 90's deal with trends such as privatization and special interest groups.

Issue 6 Managing Innovation

Chairman: Joseph L. Dionne, Chairman and
CEO, McGraw-Hill, Inc.

Why some organizations have a reputation for being innovative while others do not. Plenary Paper by: Dr. Michael Porter, Harvard Business School.

Issue 7

The Financing of Business in the 1990's
Chairman: Fred H. Joseph, CEO, Drexel
Burnham Lambert

Have traditional methods of corporate financing become outdated by leveraged buyouts and new trading strategies. Plenary Paper by: Henry Kravis, Kohlberg, Kravis, Roberts.

Issue 8

Managing Human Resources in the 1990's
Chairman: Harry D. Garber, Vice Chairman,
Equitable Life Assurance Society of America

What is the outlook for human resources management, particularly in the light of world competition, demographic changes and the need for a more skilled labor force. Participants include: Fredrick Salerno, President and CEO, New York Telephone.

Issue 9

Industrial Development in Third World Countries

Chairman: Maurice Strong
Chairman, Strovest Holding Inc.

What are the key factors in successful industrialization and why do some countries succeed while others fail. Plenary Paper by: David Hopper - Sr. V.P. for Policy, World Bank.

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located annually to all employees in proportion to their relative salaries as BO debt is paid down. Presently, of all shares have been allocated to employees.

have not been surprised to observe we are able to attract, retain, and rate the highest quality staff. Work has sharply improved. Productivity has increased. We've gained a competitive edge in the markets we serve, domestic and foreign.

took the ESOP step with caution in two stages, but it has been a trying experience to see the favorable impact it has made in our company. In age of enlightenment, ESOP has been the way to optimize owner-man-employee relationships.

W. E. Leonhard
Chairman and CEO
Parsons Corp.
Pasadena, Calif.

our story unfortunately and uncritically parrots our competitor's long-running advertising campaign about the value of their ESOP to improve service and increase market share ("With its ESOP, Avis tries even harder," Cover Story 15). Neither of these alleged benefits have materialized. On the service side, a dramatic drop in

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customer complaints was cited as evidence of improvements brought about by the ESOP. Had your reporter checked with Hertz, he would have learned that our complaints are down by an equally dramatic amount.

A more egregious factual error was the level of debt Avis must bear. According to published sources, Avis has more than \$600 million outstanding, not the \$395 million cited. This level of debt places Avis fourth among the top four rental-car companies in the critical measure of debt to equity, with a ratio of 13 to 1. Hertz, by comparison, is at 2.5 to 1.

This is an important point, because it means their ability to fund the develop-

ment of new services is severely hampered. Their lack of innovative, substantive programs and new services over the past year is evidence of this weakness.

Their heavy debt load also questions the assertion that Avis "has recorded higher profit-sales ratios than car-rental leader Hertz Corp." The fact is that their profitability is not better than ours.

Finally, and most important, Avis is no closer to becoming No. 1. According to *Automotive Fleet Factbook*, Avis is seven points behind Hertz in market share with 19.4%, compared with our 26.4%. At the critical airport locations, *Auto Rental News* places Avis nearly 5% behind us (27.3% vs. 32.1%). In fact, Avis' on-airport market share peaked at 28% in November, 1987, and has declined since.

This evidence certainly does not support BUSINESS WEEK's contentions about the power of Avis' ESOP. Quite the contrary, the evidence constitutes a picture of a struggling competitor fighting just to maintain its market position.

Joseph M. Russo
Staff Vice-President
Hertz Corp.
Park Ridge, N. J.

Editor's note: The debt figure cited in the story was identified as "buyout



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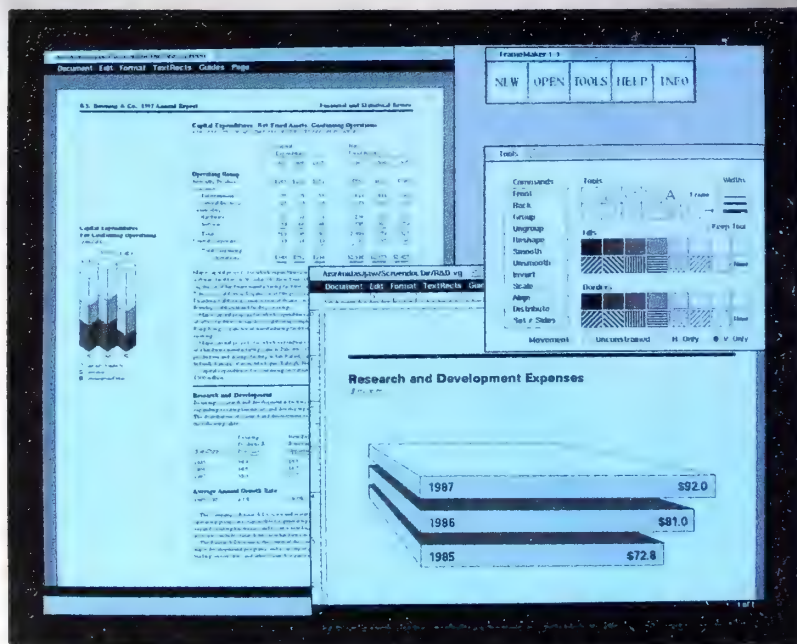
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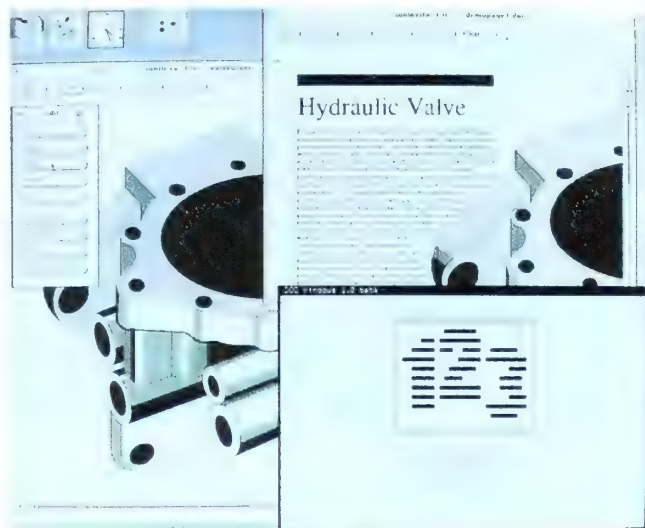
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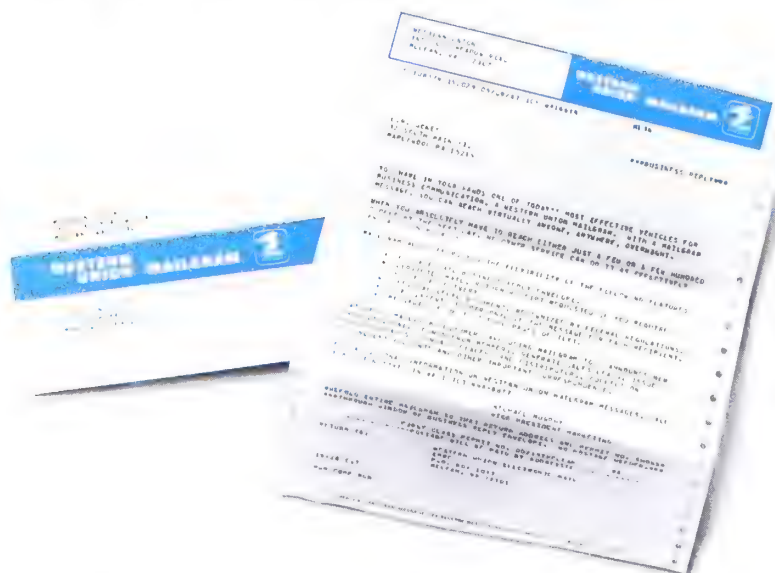


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USE THE 'L' WORD DESCRIBE S CORPS

The tax tip in your article "When an S corp may spell tax relief" (Personal Finance, May 15) refers to the S corporation provision of the 1986 tax law as a "major loophole" for small-business owners. It might have been helpful if a brief history of the legislative history of S corps had been mentioned. This provision came from the tax law in 1958 as part of a package of legislative relief for small-business owners. It gave recognition to the fact that a small-business owner has one of three forms of business. At the time, it was recognized that business considerations, other than income, should control the decision to choose between a proprietorship, partnership, or corporation.

We hope that a deficit-conscious Congress will continue to recognize and reinforce the S corp provision as "small-business relief" and not as a major loophole.

G. Burke Mims
Nygard, Mims & Hoffman
Portland, Ore.

ARE WILDCATTERS AN ENDANGERED SPECIES?

Your generally accurate description of the sad state of domestic petroleum exploration and drilling activity ("The big spill's big chill," Industries, May 1) may nonetheless leave some readers with an incomplete picture.

The article focused primarily on activity by big oil, the integrated international petroleum companies. Historically, the wildcatters, independent explorers and producers, have been the driving force in domestic oil and natural-gas exploration and development in our country.

For example, independents drill about 90% of exploratory, or wildcat, wells and 80% to 85% of all wells in the U.S.—onshore, offshore, in Alaska, and in the lower 48. Also, independents find significantly more than half of all new oil and natural-gas reserves.

No matter how desirable, development of alternatives to conventional oil and natural gas as our primary energy sources is highly unlikely before the year 2000. Thus, at least for the next decade, the fate of U.S. energy supply and security is inextricably tied to inde-

pendent producers. The question is: Will there be enough independents and domestic industry infrastructure left to meet the challenge?

Activity by independents, to a great extent, drives the domestic drilling rig count either up or down. It is the utilization—or lack thereof—of domestic drilling rigs that in turn fuels the infrastructure of domestic exploration and production. This infrastructure provides hundreds of thousands of jobs, not just in oil- and natural gas-producing states, but throughout the U.S.

Congressional enactment of measures to stimulate increased activity by independents is essential. But this won't happen unless consumers—individual, business, and industrial—recognize the vital role of the independent explorer/producer and the need for action.

H. B. "Bud" Scoggins Jr.
President
Independent Petroleum Assn.
Washington

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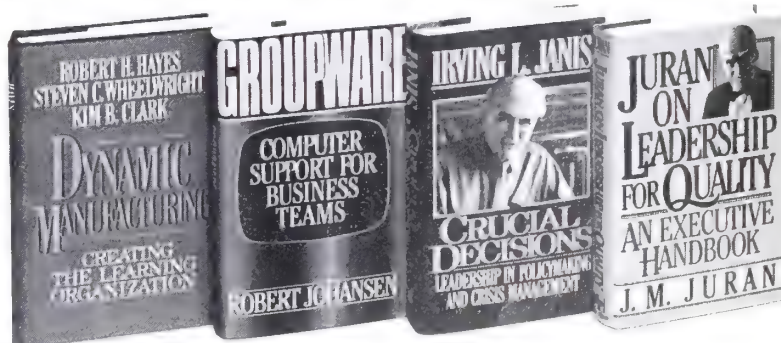
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NECESSITIES: RACIAL BARRIERS IN AMERICAN SPORTS

By Phillip M. Hoose

Random House • 163 pp • \$15.95

HOW RACISM IN SPORTS TILTS THE PLAYING FIELD

It has been two years since Al Campanis vanished into the Bermuda Triangle of sports analysis. On the 40th anniversary of Jackie Robinson's debut as major league baseball's first black player, Campanis, then vice-president for player personnel of the Los Angeles Dodgers, was discussing racial integration in baseball with ABC *Nightline's* Ted Koppel.

"Why are there no black managers, general managers, or owners?" Koppel asked. "Is there that much prejudice in baseball today?" Campanis replied: "I don't believe it's prejudice. I truly believe they may not have some of the necessities to be, say, a field manager or perhaps a general manager."

A hail of criticism forced Campanis to resign from his post. But while his re-

racial biases have produced a far-from-level playing field.

Necessities aims its biggest blast at the media, which Hoose says portray "blacks as undisciplined brutes, Latins as explosive firecrackers, and whites as heady, gutty leaders who overcome their damned inferior equipment through Puritan effort." But blacks and Hispanics are only the latest victims. In the late 1930s and early '40s, Jews dominated professional basketball, and then-columnist Ed Sullivan wrote that this was possible only "because the Jew is a natural gambler and will take chances."

Today the biases are more subtle. Hoose cites CBS's 1987 coverage of Indiana University's four-game road to the NCAA basketball championship. While the Indiana team often had

completely. Hoose sees precisely that sentiment behind a 1974 Labor Dept. decision to restrict the number of foreign-born players who can enter U.S. professional baseball. The quota effectively limits the number of Latins to about 10% of all players joining the minor leagues. Since the major leagues paradoxically spend millions on baseball schools cultivating talent in such countries as the Dominican Republic, the quota is particularly harsh on aspiring Latin players.

Labor justifies the ceiling as a measure that safeguards American jobs against foreign competition. But in an interview with Michael Dougherty, a manpower development specialist at Labor, Hoose unearthed another rationale. "There would be a big revulsion of the American fan," said Dougherty, if a flood of talented Latins dramatically changed the complexion of baseball. That conclusion seems odd, considering that the scarcity of white players hasn't kept either the NCAA or the NBA from enjoying record levels of popularity and profits.

Of course, sports do help minorities grow rich in skills and dollars. But the average time they spend in the major leagues is short. With mere



mark may have been embarrassing, he expressed a view that author Phillip M. Hoose believes reflects the widespread subconscious values of sports' power brokers. The incident spurred Hoose, whose previous books include one about basketball, to write *Necessities: Racial Barriers in American Sports*, a hard-hitting analysis of the political and social dynamics that typecast minorities in professional athletics and have helped shape American sports.

His crisply written study gives a sharp new focus to the issues raised in *A Hard Road to Glory*, Arthur Ashe's trilogy on black athletes in America, and in Tom Brokaw's recent NBC special, *Black Athletes: Fact & Fiction*. Based on 100 interviews with athletes, scouts, executives, and journalists, Hoose marshals powerful evidence to confirm that

three blacks and two whites on the floor, broadcasters Brent Mussberger and Billy Packer used the word "athlete" and its derivatives to describe only the black players. Once, a black player grabbing a rebound reminded Packer of "one of those animals that catch flies with their tongue." White players, in contrast, were lauded for their intelligence and discipline.

Hoose sees preconceptions among coaches, too. They often believe that black football players, for instance, are faster and less intelligent, so they put them at, say, halfback. Whites end up at quarterback, a position that requires more thinking and has more leadership responsibility.

It's almost as if coaches fear that unless some positions are kept open for whites, minorities will dominate sports

opportunities for coaching, management or ownership, their careers end when their bodies give out.

Hoose stops short of plunging into the larger question of racism in America. And that restraint is part of what gives *Necessities* its disturbing concreteness. Discussions of the "white center" in sports—the pitcher-catcher axis in baseball, the quarterback in football—livid for years, but little has changed. As Hoose assembles the statistics that back up minority athletes' fears and complaints, the bleak picture he paints makes one wonder how long it will take for the next Jackie Robinson to break through the barriers that remain.

BY RON STODGHILL

Washington Correspondent Stodghill writes frequently about sports business and urban affairs.

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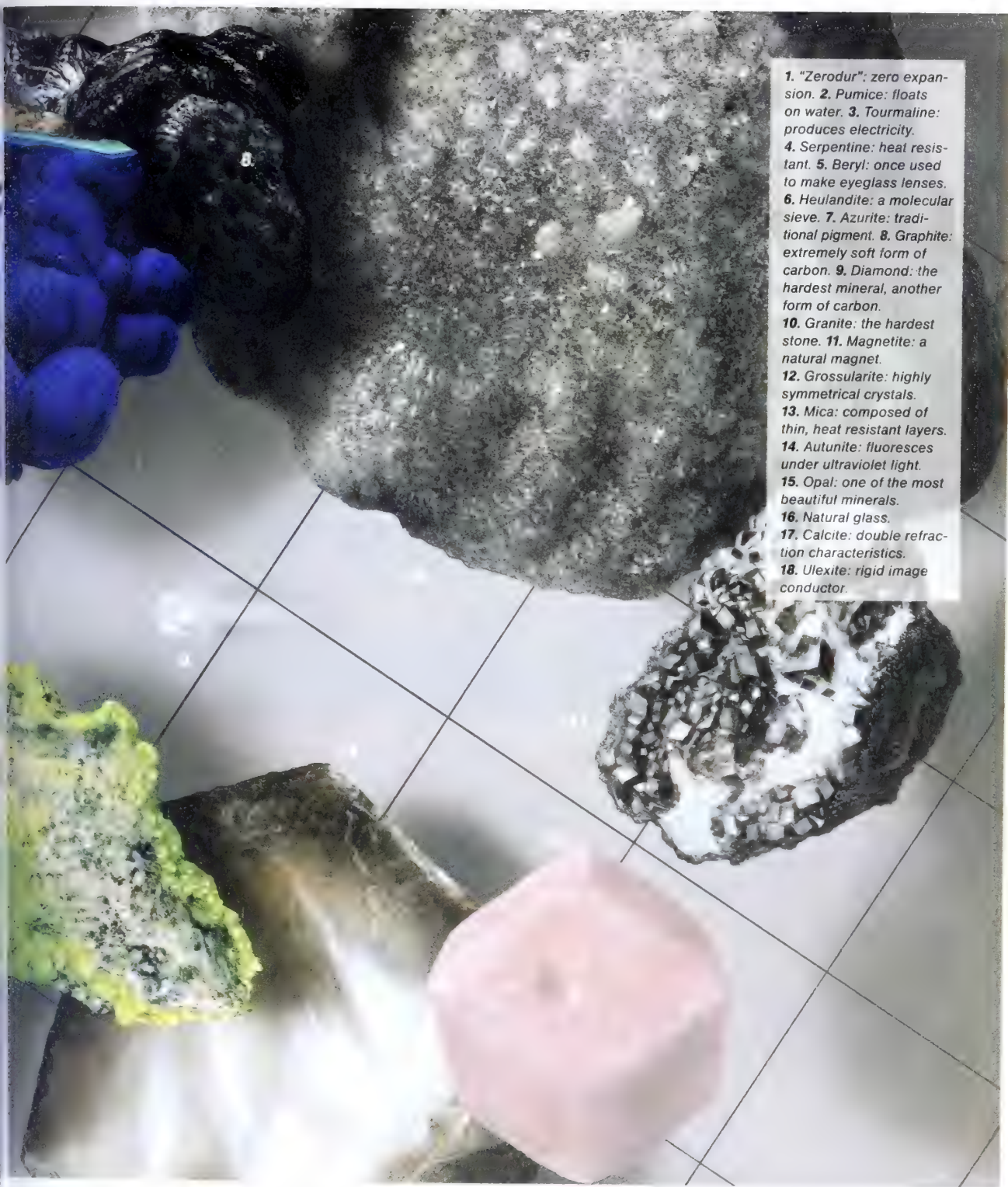
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A LITTLE TINKERING COULD DO WONDERS FOR STEEL QUOTAS

BY ROBERT KUTTNER



Sure, the quota system has glitches, but it still beats phony 'free trade.' And it can be fixed by eliminating supply bottlenecks, auctioning quotas to the highest bidder, and pushing hard for an end to steel subsidies abroad

Four weeks ago, I argued in this space that import quotas on steel should be extended beyond their scheduled expiration next September. The reason, I contended, is that most countries do not practice free trade in steel. If the U.S. unilaterally permitted unlimited entry of foreign-subsidized steel, most American steelmakers would be driven out of business. We were well on the way to this result during the early 1980s when American steelmakers lost \$12 billion in four years.

I received several anguished letters and telephone calls accusing me of shameless protectionism. The most convincing complaint came from steel-using manufacturing companies. Their arguments boil down to two. The quotas force steel-using companies to pay more for their steel, which makes them less competitive. And the quotas also lead to occasional bottlenecks in some product lines, in which steel-consumers are temporarily unable to get product at any price.

Obviously, the American manufacturing industry should not be held hostage to the steel industry. Yet unilateral free trade in steel is no solution. It is illogical to treat the steel question by taking a snapshot at one point in time and observing that cheaper foreign steel is available at that moment—for the existence of a domestic steel industry obviously influences pricing decisions by prospective foreign exporters. If American steelmaking became extinct, the steel-using companies would soon be at the mercy of foreign suppliers, who would be quick to raise prices once they had captive customers. How, then, to reconcile the national interest in retaining a steel industry with the equally valid national interest of allowing U.S. manufacturers to get their steel on time and at a fair price?

TIGHT SUPPLY. The quota system in steel, which goes by the dishonest name of Voluntary Restraint Agreements (VRAs), needs to be understood as a temporary, necessary second-best. It is not perfect and could certainly be improved pending an eventual agreement either to have free trade in steel or at least to have all producer nations play by common rules. First, we should revise the quota program to eliminate supply bottlenecks. Quotas should be reviewed every few months and should be liberalized for products in tight supply.

For example, Caterpillar Inc. reports that it was unable to get the large special-section steel it uses in tractor tracks, because U.S. producers do not make that product, and that its March, 1988, request for a quota waiver took four months to get approval. General Motors

Corp. reports difficulty obtaining steel used in wheel bearings. The quota waivers permitted under the existing VRA system, known as "short supply requests," should be simplified so that a company that can't find domestic steel can get an imported substitute to meet its production schedule. This would help discipline domestic steelmakers.

RECIPROCAL RULES. Second, this dilemma offers a very good reason for the steel industry and the Commerce Department to commit a heresy that most industrial nations consider a normal aspect of doing business—namely, a degree of economic planning. Somehow, Japanese steel users do not find themselves short of steel, even though Japan stringently restricts steel imports. Using input-output models, it is possible to roughly match demand for different steel products during the coming months. In product lines where the domestic steel industry cannot fully meet domestic demand, steel quotas should be thrown open. Better forecasting and more coherent planning help determine when and where.

Third, we should replace the present arrangements, in which quotas are privately negotiated country by country, with a system of auctioned quotas in which any supplier can compete. Where quotas are politically allocated, the foreign producer captures any excess profits. But if the right to meet a steel quota were auctioned by the U.S. government, then the lowest-cost foreign producer would purchase the export rights, and the extra profit would go to the taxpayer in the form of quota fees.

Finally, the Administration should use steel quotas as a lever to move toward a system where all nations gradually reduce their subsidies of the steel industry and where steel is at least traded according to reciprocal rules. The U.S. opens about 20% of its steel market to imports. Other large steel-producing nations manage their trade in steel to keep import penetration levels well below 20%. Thanks to new investments in more efficient steelmaking and the cheap dollar, the U.S. is now the lowest-cost producer in many steel product lines. If the U.S. opens 20% of its market to foreign steel, it is only fair that nations wishing to compete for that market open their own domestic markets to a comparable degree.

It's time for the Administration to recognize that managed trade can be a defensible second-best in an imperfect world. If used shrewdly, steel quotas can move us toward a system in which all nations waste less money on subsidies and excess capacity, and all agree to practice if not free trade, at least trade.

ROBERT KUTTNER IS ECONOMICS
CORRESPONDENT FOR THE NEW REPUBLIC
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Economic Trends

BY GENE KORETZ

A NEW, IMPROVED INDEX SAYS RECESSION ISN'T A THREAT . . .

With the expansion well into its seventh year—the equivalent of advanced old age for a business upturn—it's hardly surprising that fears of a recession have been growing. Indeed, only a few months ago, the government's composite index of leading indicators seemed poised to give the time-honored warning signal of an approaching recession: three consecutive monthly declines.

But after dropping in both February and March, the leading index posted a

five straight months starting in September, 1987, if it had been in use then).

What's more, with a month's lag before the index is released and the three-month recessionary rule of thumb, it takes four months before a sustained decline even starts flashing warning signals—often leaving scant time before the downturn actually occurs.

In contrast, Stock and Watson's experimental recession index is intended to be both more precise and more useful by providing an estimate of the probability that the economy will be in recession in six months' time. The two economists have chosen components that are subject to little or no revision (exchange rates and interest-rate changes and spreads are examples). They have also used modern econometric techniques to anticipate changes in those components subject to revision. And they have discarded such traditional leading variables as stock prices and the money supply on the grounds that they add little information to their forecasting tool.

Based on historical data, the researchers' experimental recession probability index would have successfully "predicted" each of the four contractions since 1960, by registering at least 70% six months before they began. It would also have touched a peak of about 55% before the 1967 "growth recession" but would have shown little risk of a coming downturn in late 1987, when fears of recession were rampant in the wake of the stock market crash. As for the current year, the index registered 27% in March and then subsided to 17% in April (chart)—suggesting, says Stack, that "the chances of a recession starting this year remain relatively small."

EMPLOYERS MAY NOT BE HIRING, BUT THEY'RE ALSO NOT FIRING

While May's unexpectedly meager 101,000 increase in payroll employment is raising concern in some quarters about a possible downturn, economist Robert H. Chandross of Lloyds Bank in New York points out that two labor market indicators point to continuing strength. Initial unemployment insurance claims fell by 23,000 the week ended May 20 and are running slightly above their average April level and significantly below their paces in February and March. And the Conference Board's help-wanted advertising index rose six points in April and remained close to its year-earlier level.

"On balance," says Chandross, "the indicators imply that employers have become more cautious in adding employees. But there's no sign of the kind of pickup in layoffs that might occur in the early stages of a downturn."

WOULD A DOWNTURN CURE WHAT AILS THE TRADE BALANCE?

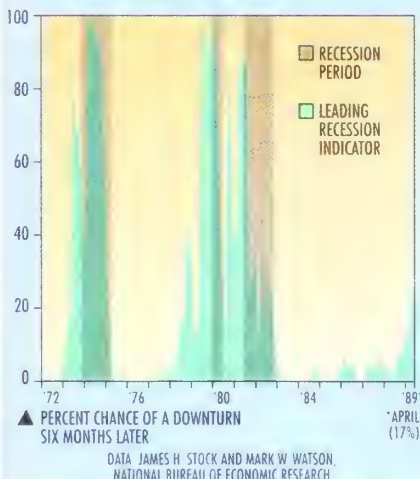
According to some observers, one of the saving graces of a recession, if it occurred, would be to accelerate progress in reducing the trade deficit. That's because waning domestic demand would curtail imports, while exports would keep rising in response to continuing economic growth overseas.

Economist Kenneth T. Mayland of Cleveland's Society National Bank points out, however, that history doesn't support this thesis. The trade balance, he notes, improved significantly during only one of the past five recessions—the 1980 downturn when credit controls took a stranglehold on consumption. In the other four, trade figures improved moderately in the 1960-61 and 1969-70 recessions, worsened sharply in the early stages of the 1973-75 recession, and ended the 1982 contraction more in the red than when the downturn began.

As for the subsequent recoveries in almost every case the trade deficits were worse a year after the upturns began than they were before the onset of the prior recessions.

The record, says Mayland, "suggests that economic problems in the U.S. tend to spread to other countries, hurting everyone's imports and exports."

A RECESSION IN 1989? THE ODDS ARE LOW



healthy 0.8% rise in April. Although that still left the index below its January high, the turnaround prompted observers to conclude that the slowdown in economic activity was not degenerating into a recession but rather into the soft landing that the Federal Reserve Board has been aiming for.

The episode illustrates the problems associated with the leading index and the reason that two economists associated with the National Bureau of Economic Research, James H. Stock of Harvard University and Mark W. Watson of Northwestern University, have recently devised an experimental "leading recession index." Because the official leading index is quite volatile and often subject to significant revision, a decline for two months in a row provides relatively little information about the future course of the economy. Even a three-month decline is not an infallible signal of a recession (the recently reformulated official leading index would have declined for

. . . BUT THE LEADING INDICATORS PROBABLY TOOK A DIVE IN MAY

April's 0.8% rise in the leading indicators index will fade away in May, predicts Wall Street economist Howard Sharpe. Out of the 11 components that make up the index, he says, some data are already available for seven, and six of them appear to have posted declines. These include sensitive materials prices, consumer expectations, the inflation-adjusted money supply, vendor performance, and the workweek. The one exception is stock prices, which were up strongly during the month. Based on the information at hand and the expectation that one or two of the remaining components will also be up, Sharpe expects the May index to be down "by around 0.7%."

Better From the Methanol Marathon



GAS: THE 1,100-MILE METHANOL MARATHON'S FINISH LINE IN COLLEGE PARK, MD.

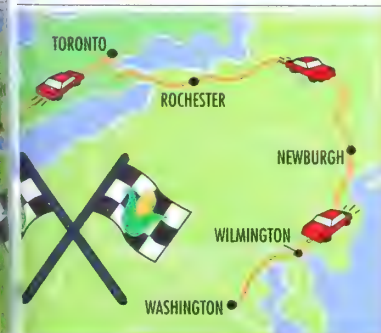
LIVING A 'CLEAN FUEL' THE OLD COLLEGE TRY

During a lunch stop in Tonawanda, N.Y., grime-covered West Virginia University students raced to replace their Chevy's fried alternator. Fellow's legs trailed out from under the car, while several classmates elbowed for room under the hood. Amid a jumble of wrenches, a half-eaten pepperoni pizza lay forgotten by the engine. Welcome to the Methanol Marathon: equal parts collegiate athletic contest, spring-break road trip, and endurance exams. The rollicking, five-day road race sponsored primarily by General Motors Corp., starred 200 engineering students from 15 universities. Their mission: Prove that their modified 1989 Corvettes could run well on methanol, a gas alternative that promises less smog. The contest couldn't be timelier. The

first major experiment in cleaner fuels has just been launched in the four-county Los Angeles basin, where 7.6 million vehicles spew 6,000 tons of pollutants daily. In just four years, car-rental businesses, taxi companies, and other fleet operators will have to start buying cars that run on methanol or another "clean fuel." By 2007, individuals will, too. Trucks and buses will also be affected. And the U.S. Environmental Protection Agency is considering mandatory requirements for alternative fuels in the country's 25 most-polluted cities.

Methanol burns cleaner than gasoline. Also called wood alcohol, it's usually derived from natural gas and produces about 20% less pollution in the form of unburned hydrocarbons, oxides of nitrogen, and carbon monoxide. Unburned methanol is also less reactive with sunlight, producing about half as much smog. And it emits less carbon dioxide, a contributor to the greenhouse effect.

To see firsthand whether methanol is a practical answer to the environmentalists' dreams, I hitched a ride with a free-wheeling team from the Florida Institute of Technology for the 1,100-mile trip from Detroit to Washington, D.C. The driver and navigator rode in the rally car. I joined the other team members, who were traveling in a van and a



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truck. After five days on the road with students, professors, GM engineers, and economists from the Energy Dept. at Argonne National Laboratory, I learned:

■ College students still like to drink beer late into the night.

■ I can't do that anymore and get up in the morning.

■ Methanol-powered cars behave much as their gasoline counterparts, except for problems starting in cold weather.

■ Some tall technical hurdles stand in the way of widespread methanol use.

GM donated the cars, offered technical advice, and organized logistical support for the rally. The auto giant's payoff was twofold: as a way to score public relations points by projecting a concern for environmental issues, and it offered a chance to evaluate some promising young automotive engineers.

Before the rally began on April 1, students presented details of their engine-conversion plans and ran the cars through a battery of tests at the Technical Center in Warren, Mich. Ironically, 6 of the 15 Corsicas failed an emissions test—including the FIT engine. To be fair, some schools lacked the equipment needed to adjust engines for low emissions. But the results hint that methanol may not reduce emissions effectively in real world applications.

One of methanol's worst problems is poor fuel economy. It burns more efficiently than gasoline but has just 60% the energy by volume. That means more frequent fuel stops, unless carmakers figure out a way to expand gas tanks without radically redesigning auto. Plastic tanks might help, but automotive engineers haven't yet found a plastic that can resist methanol's corrosiveness.

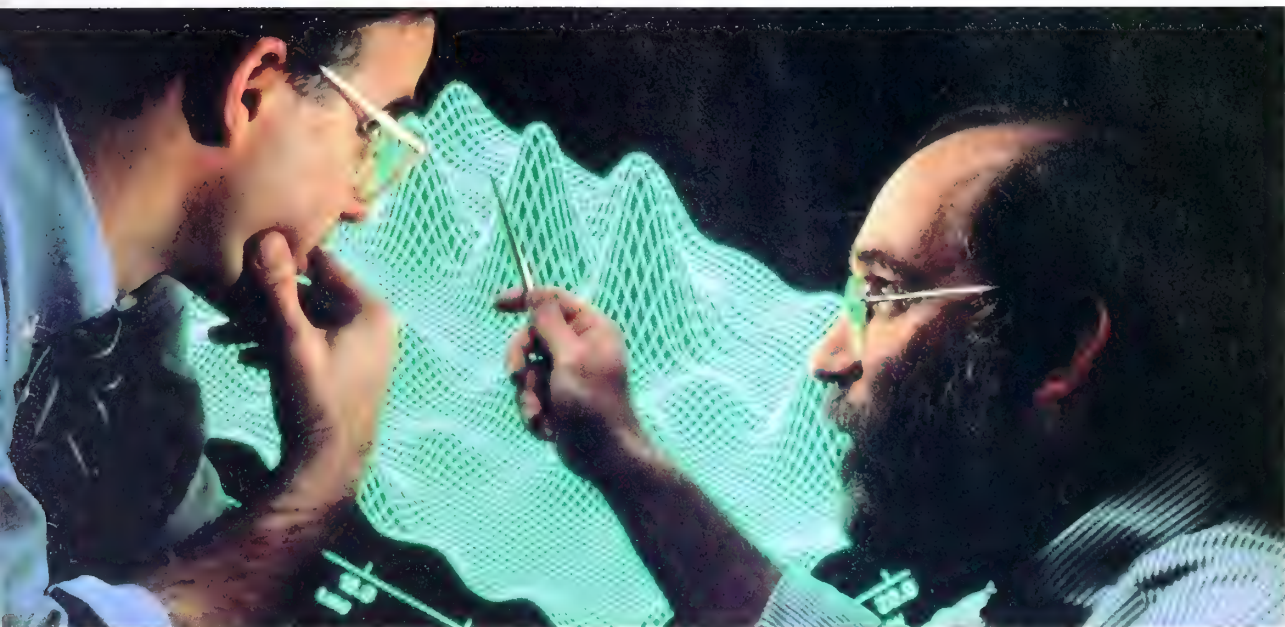
RESPECTABLE. FIT took an unusual approach to boost economy. At cruising speeds, the engine's computer shut off fuel to three of the Corsica's six cylinders. Driving at a steady 45 mph over a 60-mile loop near FIT's campus in Urbana, the group reported a very respectable 37 miles per gallon. Since economy counted for nearly a quarter of the marathon score, student leader Dr. Hahn, a 30-year-old former pro stock crew chief, promised a good showing.

But the three-cylinder strategy did not work as anticipated. The flatlands of Florida are far from the hills of Ontario and upstate New York. Too often, drivers had to kick in all six cylinders for power, gulping fuel in the process.

The fleet of 15 rally cars, running a blend of 85% methanol and 15% unleaded gas, averaged 17.8 mpg over the week. The FIT team did a little better, averaging 17.9 mpg. The eventual winner, University of Tennessee, achieved the best average, 20 mpg, with the help

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ots speak many languages. They have their own dialects, Edinburgh Prolog, Logo and Hope, piled at a University which has nurtured innovation for four hundred years. Lecture halls which once echoed to the voices of Kelvin and James Clerk Maxwell now ring with the talk of signal processing and image analysis. Scientists explore sensory robotics and silicon logic. Digital Equipment, Motorola and Hewlett-Packard have all taken their place in Silicon Scotland, guaranteeing them access to future generations of systems designers and quality engineers. Forty-nine thousand people have trebled the value of Scottish electronics in the last years. Over half of the US electronics industry leaders are in Scotland, thriving and growing; three of the top five information systems companies are also here. Integrated circuits and workstations, ultrasound and fibre optics are sold to the world from this small country. Scotland extends its welcome to join a community where over three hundred companies speak your language—the language of advanced technology. Come to Scotland and you'll never look back. Call toll-free 1-800 The Scot.



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Letter From the Methanol Marathon

modified fifth gear and the type of gingerly, feather-foot driving techniques that I, for one, seldom use.

Since methanol isn't readily available, its poor mileage is doubly troublesome. To untether cars from methanol outlets, the Big Three have prototypes capable of running on methanol, gasoline, or any blend of the two. Chevy showed off two models at the rally's first stop Saturday night near Toronto. To resist corrosion, the modified cars have hardened engine parts as well as stainless-steel gas tanks, fuel pumps, and fuel lines.

WHEELIES. Flexibility costs, though. Chevrolet figures its dual-fuel Lumina, 2,200 of which will be delivered to the California Energy Commission by 1992, will cost \$2,000 more to make than gasoline counterparts—even at production levels of 15,000 cars annually.

During the rally, cars fueled up twice daily from 55-gallon drums provided by British Petroleum Co. Hanging around at stops, students had a lot of time to kill, and, predictably, they found ways to amuse themselves. Outside Utica, N. Y., the University of Michigan's team briefly mourned a groundhog its car had hit that morning. Then, like fighter pilots, they placed a groundhog "kill" sticker

on the driver's door. Later that day in Newburgh, a crew from Colorado State University tried to coax wheelies out of their support vehicle, a large mobile home. They packed the back with people and hit the accelerator, raising the front wheels a few inches off the ground.

The following morning as I stood behind an idling rally car, my eyes began to water as if I had rubbed them with

Among methanol's problems:

Low mileage and high formaldehyde emissions, especially with a cold engine

onion juice. I was reacting to formaldehyde in the exhaust. The noxious gas, which is an eye, skin, and respiratory-tract irritant, may pose the same health hazards as gasoline emissions. Formaldehyde can be broken down into water and carbon dioxide in specially designed catalytic converters. Engelhard Corp., a major supplier of converters, says prototype tests produced formaldehyde emis-

sions of 1 mg per mile, well below the California standard of 15 mg per mile.

Since converters are effective only at normal operating temperatures, however, nearly all the formaldehyde produced during warm-up would spew into the atmosphere. Whether the trade-off of formaldehyde for smog would aid people with respiratory difficulties isn't clear.

The short, final leg of the marathon from College Park, Md., to Capitol Hill wasn't part of the rally or fuel-economy test, so five of us piled into the Corsica for a last ride together. Hahn tried to shrug off his disappointment over his ninth-place finish. But it showed, as he fantasized about turbocharging the engine, welding on a roll cage, and taking the car out on the racetrack.

Hahn's frustration may soon be shared by both bureaucrats and Southern Californians. In struggling to maintain a mobile lifestyle while meeting federal air-quality rules, they'll trip over the same obstacles encountered on the marathon. But the stakes involved in Los Angeles will be a lot higher, and trying to resolve them will be a lot less fun.

BY DAVID WOODRUFF

Correspondent Woodruff covers the auto industry from BW's Detroit bureau.

Sizing Up the Earth in 200 B.C.

Eratosthenes, director of the great library at Alexandria in EGYPT, believed the earth to be round. So he decided to do what no one had ever done—measure it. With a simple measurement of the sun's shadow in two places, he was able to calculate the earth's circumference fairly accurately.



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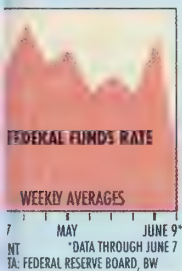
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THE FED IS FIRING UP THE ODDS IN A 'SOFT LANDING'

Any fears that the economy is speeding up again after its first-quarter slowdown can now be put to rest. April's numbers gave mixed signals. But the Fed's data, led by the month's lackluster employment report, are unequivocally soft.

The Federal Reserve Board seems convinced that the dangers of inflation are receding. In fact, it feels that it is a safe time to loosen the reins on monetary policy. That increases the chances that the Fed can guide the expansion in for a soft landing—slowing the economy without causing it to crash into recession.

THE FED LOOSENS UP CREDIT



Market pressures for lower interest rates have already pushed down short-term rates a full percentage point since late March. On June 5, major banks lowered their prime lending rate to 11% from 11.5%, mainly because the spread between their loan rates and their cost of funds had widened. Interest rates on a wide range of consumer and business loans will

be helped, helping to keep the expansion afloat. Following that trend, the Fed allowed a small but politically important decline in the federal funds rate, a charge on interbank borrowing, and recently the most important indicator of Fed policy. Beginning on June 5, the Fed appeared to be establishing a new lower rate for the funds rate, probably close to 9.5% (chart). The central bank began pushing up the federal funds rate more than a year ago, and this is the first time since then that it has eased up. The funds rate rose steadily from 6.5% in March, 1988, when the Fed began tightening around 10% in March, 1989, when it put further increases on hold.

IMMER BRING THER E CUT

The Fed's timing couldn't have been better: The move was almost a no-lose situation. For one, it should please the White House. The Administration had intensified calls for Fed easing, which had widened an ongoing rift among the board's members. Easing up will eventually please foreign governments, lower U.S. rates, especially in concert with recent moves in Japan, will help reduce upward pressure on the dollar. For now, though, much of the greenback's strength reflects political instability in other parts of the world, making the dollar a safe haven for foreign investment. That's particularly true for countries along the

Pacific Rim close to the turmoil in China (page 28).

The financial markets will also be happy. They seem reassured that the Fed's actions validate the spate of data that now show the economy is slowing down to a noninflationary pace. And they know the Fed move is a necessary condition for continued expansion.

Further Fed easing will depend on more good news about inflation in coming months. But market interest rates may be headed lower anyway. The half-point drop in the prime rate still leaves a sizable spread between banks' lending rates and their cost of funds. That could produce another prime-rate cut this summer. Such an improving outlook for interest rates is the main reason the slowdown isn't likely to deteriorate into a recession.

FACTORY FLOORS QUIETED DOWN

The latest report from the labor markets was the best evidence yet that the Fed's efforts to rein in an inflation-prone economy are succeeding. Throughout this expansion, the job markets have given the most accurate

tip-off to the economy's performance. But there are still problem areas, mostly in the service sector, where a tight job market continues to push up wages.

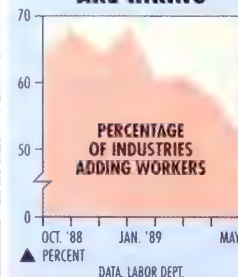
Overall employment in nonfarm industries rose by just 101,000 in May, to 108.2 million, the smallest gain since 1986. That brought down job growth during the first five months of 1989 to an average of 220,000 jobs per month, down from 275,000 per month for all of 1988.

The slowdown in the current quarter is sharper still. As part of its annual benchmark revisions, the Labor Dept. increased April's job gain to 206,000 from its previous estimate of 117,000. Even so, job growth in the second quarter is lagging well behind its first-quarter average of 264,000 per month. Moreover, only 52.7% of the 349 industries surveyed added workers in May (chart). That was the lowest hiring rate in three years.

The weakness was especially broad in manufacturing. Factory jobs dropped by 18,000 after falling 11,000 in April. Less than half of all manufacturers added workers, and industries such as metals, apparel, and plastics reduced employment. The biggest loser was electrical machinery, which has been shedding workers for the past six months. Jobs there fell by 7,000 in May.

The manufacturing workweek shrank to 41 hours last month from 41.2 hours in April. Overtime also fell in

FEWER COMPANIES ARE HIRING



Business Outlook

May, to 3.8 hours from 4 hours. Both measures are still high by historical standards, but the declines, combined with the loss in jobs, indicate that industrial production in May was weak compared with April.

That's consistent with the National Association of Purchasing Management's report of slower growth in the industrial sector. The NAPM's composite index of business activity fell in May to 49.7%, the lowest reading in more than three years.

The NAPM also had pleasant news on inflation, at least for goods prices. It said that the rate of growth in prices fell sharply in May. That's consistent with the report that market conditions are easing: The speed of vendor deliveries picked up for the first time since September, 1986. Moreover, members reported only 12 items in short supply, the fewest since November, 1987.

Service industries continued to create jobs at a healthy clip, though job growth there has also slowed. In May, service payrolls climbed by 134,000, but government accounted for 32,000 of that gain. In the private sector, health services added 30,000 workers in May, and hiring was strong in finance and transportation. Employment at department stores and car dealerships fell, however, the result of consumers' reluctance to spend.

SERVICE PAYCHECKS MAY FATTEN

Because nonfarm hiring has tapered off this quarter, there's some optimism that wage growth will also slow. But that may take a while. So far, there's little evidence of its cooling off. True, the average hourly wage rose by just 0.1% in May, but that followed a very strong 0.6% gain in April.

Upward pressures on wages, particularly in services, continue to cloud the inflation outlook. That's because there's usually a lag between slower job growth and an easing up in the labor market. For example, the civilian unemployment rate in May edged down to 5.2% from 5.3% in April. And the percentage of the adult population

at work remained at its record high of 63% last month.

Another sign of tightness in May: The number of people who could find only part-time work dropped by 321,000, to 4.6 million. That's the lowest level in 10 years. Although that figure will probably rebound in June as more students look for jobs, its steady long-term decline suggests that demand for labor is still high.

As a result, some companies may have to raise wages even more to attract labor—especially in services, where most of the extra workers are needed. For this quarter, service wages will grow at an annual rate of about 5.5%, up from a 4% pace in the first quarter.

In goods-producing industries, wage growth has slowed this quarter, probably to an annual rate of about 2.2%, from 3% in the first quarter (chart). The deceleration mainly reflects the wage slowdown in manufacturing, where job markets have loosened up the most.

That easing will continue to relieve pressure on goods prices. It also means that even with a stronger dollar, manufacturers can stay competitive in global markets. During the past year, prices have continued to rise much faster than manufacturers' unit labor costs, which are up only 1.1%. But the faster pace of service wages will continue to push up inflation on the service side of the economy. That's important because services account for half of the consumer price index.

Under such conditions, the Fed will probably continue to ease cautiously. Weaker job growth in May does suggest that the economy is throttling down to a crisis speed low enough to allow a soft landing. That will eventually loosen up even the labor market for services, cooling off wage growth. The real trick for the Fed now is to make sure the economy doesn't stall.

WHERE WAGES ARE STILL RISING



THE WEEK AHEAD

RETAIL SALES

Tuesday, June 13, 8:30 a.m.

Retail sales were probably flat in May. That's suggested by a drop in car sales and moderate gains in department store purchases. In April, sales rose 0.4%.

BUSINESS INVENTORIES

Wednesday, June 14, 10 a.m.

Business inventories most likely grew by 0.5% in April, after rising 0.3% in March. Business sales, unchanged in March, probably increased 1.6% in April.

MERCHANDISE TRADE BALANCE

Thursday, June 15, 8:30 a.m.

Most economists expect that the trade deficit narrowed in April, to \$8.4 billion

from \$8.9 billion in March. But it might look even better than that. Customs duties fell sharply in April, suggesting a big drop in imports. Exports probably declined after their March surge.

INDUSTRIAL PRODUCTION

Thursday, June 15, 9:15 a.m.

Declines in manufacturing jobs and the factory workweek indicate that industrial output fell by about 0.3% in May, nearly reversing the 0.4% gain in April.

CAPACITY UTILIZATION

Thursday, June 15, 9:15 a.m.

The expected fall in industrial production suggests that operating rates loosened in May, to 83.7%. In April, 83.9% of available capacity was in use.

CONSUMER PRICE INDEX

Friday, June 16, 8:30 a.m.

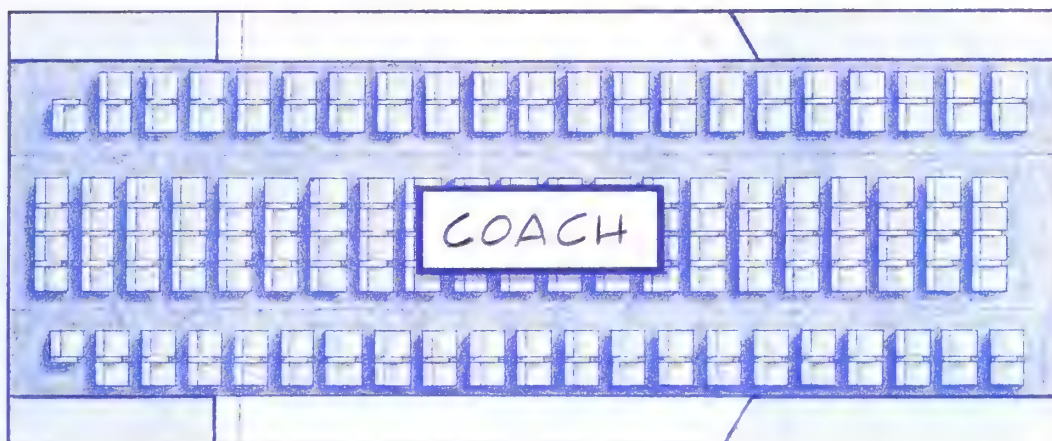
The consensus is that consumer prices advanced by 0.5% in May, following a 0.7% jump in April. The slower, but rapid, rise is suggested by a smaller increase in energy prices in May, compared with a 5.1% jump in April. Pricing for new cars, however, was largely unchanged after falling 1.2% in April.

HOUSING STARTS

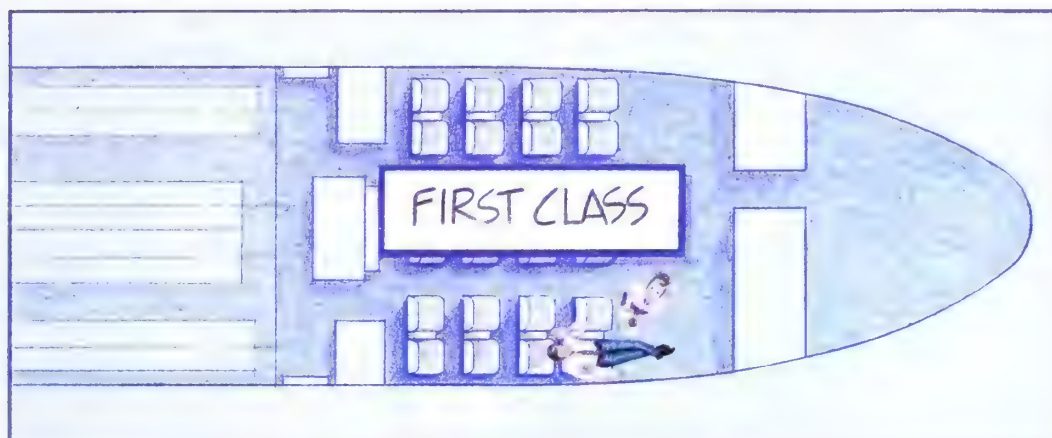
Friday, June 16, 8:30 a.m.

Housing starts probably rose to an annual rate of 1.4 million, after falling for three consecutive months. Signaling a rebound were April's increases in new-home permits and building permits.

YOUR CORPORATE POLICY.



OUR CORPORATE POLICY.



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CONTINENTAL

CHINA



The Great Leap Backward



In scenes reminiscent of Tehran and Saigon, worried foreigners besieged airline offices and mobbed airport ticket counters to secure flights out of Beijing. Others wept openly in the lobbies of once-comfortable hotels as troops of the 27th Army rolled down the streets outside. It wasn't clear whether Deng Xiaoping had ordered the troops to crush the pro-democracy movement on June 4, or whether aging but still powerful military leaders had staged a coup. But it was plain, one American executive commented as he prepared to leave, that "those old men have just ruined the nation."

Suddenly, China is lurching toward civil war. Troops believed sympathetic to the nation's decade-long opening to the outside world were squaring off and had begun skirmishing with the 27th Army. Spy satellites showed troops moving toward Beijing from all parts of China, as generals debated which side to join. Thus the 3 million-man People's Liberation Army was headed for a showdown with itself—of ideas, if not of arms—that could decide the country's future. A group of doctrinaire Marxists skilled in the use of purges and secret police ousted reform-minded Zhao Ziyang as Communist Party boss and placed themselves in power.

DASH FOR GROWTH. It would be the first civil war in a nuclear-armed nation. At midweek, high-ranking U.S. intelligence sources were expressing mounting concern over which military factions controlled China's nuclear arsenal, which is the world's third-largest. American officials also are worried that U.S. listening posts along the Sino-Soviet border used to monitor Soviet nuclear testing activity could be in jeopardy.

The key question was whether the troops that crushed thousands of mostly unarmed protesters in Beijing could rule a nation of 1.1 billion. Those forces, loyal to military leader Yang Shangkun, 81, numbered only a few hundred thousand—but they were well-armed. Although there were clashes in Shanghai, Chengdu, and other cities, the hardliners had not yet established full control. Millions of Chinese, particularly in the thriving coastal areas, hoped to continue their dash for growth with the protection of sympathetic local military units, some of whom are business partners. But the prospect that they would be confronted by hardliners' troops looked great.

No matter how deep, how widespread, or how long the conflict, it's already clear that China will pay a frightful price. The nation's economic and diplomatic relations with the outside world have been set back by years. The confidence of foreigners, who invested some \$11.5 billion in modernizing China's industrial base, has been shattered (page 32). France may not finish work on two nuclear power plants, and other key infrastructure projects could lapse. Technology transfers, government aid programs, arms sales, World Bank lending, and other vital ingredients of China's modernization drive could be stalled indefinitely.

In one such move, President George Bush on June 5 halted \$600

GETAWAYS: WITH TANKS AND TROOPS CHOKING MAIN THOROUGHFARES, A BICYCLIST FAST AS HE CAN DOWN CHANGAN BOULEVARD. AMERICAN AND JAPANESE STUDENTS FLEE PORT TO TRY TO GRAB THE FIRST PLANE TO TOKYO



THE OLD GUARD: IS PRESIDENT YANG SHANGKUN (LEFT, WITH ZHAO ZIYANG AND LI PENG) ACTING WITH DENG'S APPROVAL—OR ATTEMPTING TO STEAL POWER?

million worth of U.S. arms sales to China and suspended contacts between the two nations' military forces. France and Switzerland also suspended military relations, and much of Europe was expected to follow the lead of the U.S. in curtailing ties with Beijing. Foreign tourism, worth \$2 billion a year in hard currency earnings for China, is quickly drying up.

Trade will also be squeezed. Foreign companies will happily sell badly needed raw materials and components to China for hard currency. But China's buying power depends mainly on whether it can continue to export as successfully as it has in recent years. DRI/McGraw-Hill predicts China's exports could fall by \$10 billion this year because of the strife. Manufacturing costs of clothing, Christmas toys, and other made-in-China exports could go up 20% or more.

SHOCK WAVES. This great leap backward reverses a sensational 10-year romance with the West in general and the U.S. in particular. In 1979, after President Jimmy Carter normalized relations with Beijing, Deng came to the U.S. on a triumphant tour, meeting the Harlem Globetrotters in Washington's Kennedy Center and donning a 10-gallon cowboy hat in Texas. Today, the 84-year-old survivor of the Long March is said to be in critical condition in a Beijing hospital. Pro-reform demonstrators around the world are denouncing him as a "Nazi." His death would inject yet more uncertainty into China's political equation.

As China suffers, the world will feel the shock waves. The British colony of Hong Kong, which is scheduled to return to Chinese control in 1997, has already been dam-

aged economically—and things could get much worse (page 34). That creates political difficulties for the government of British Prime Minister Margaret Thatcher, which insists it will not renegotiate its treaty with Beijing. And with racial concerns not far beneath the surface, London also says it cannot accommodate large numbers of Hong Kong Chinese immigrants. The devastating loss of confidence in Hong Kong is likely to result in a new surge of emigration and capital flight, much of it headed for North America and Australia.

The entire communist world also will feel the impact. The carnage in China will deepen the debates in the Soviet Union and other communist societies that are experimenting with similar economic reforms. Hardline conservatives will use China's crisis to warn against moving too fast, but reformers will counter that it shows the risks of moving too slowly. East Germany's official media, for example, attacked Chinese

demonstrators as "rabble rousers," and Hungarian television decried the "murder in Beijing." In Poland, the Chinese tragedy hardened Solidarity's resolve—despite its electoral landslide to work with the government, rather than push it from power (page 46).

China's crisis also carries major implications for Asia. The mainland's stability has been one of the underpinnings of the region's stunning economic progress. Now, China's role in settling key issues such as Vietnam's occupation of Cambodia and in maintaining stability on the divided Korean Peninsula is called in question. Japan also inherits a policy crisis—at least in part because Japanese banks hold the lion's share of China's \$37 billion in foreign loans. Throughout Asia, China's chaos will affect capital flows, raw material purchases, and manufacturing patterns.

WHO'S IN CHARGE? China's upheaval could force a reevaluation of U.S. policy toward the region. Enhancing development has been a cornerstone of Washington's Asian strategy. At the same time, the U.S. gradually has been refining its approach to trade and investment issues with Japan. Now, some Japanese commentators are suggesting worries about instability in Asia should persuade Washington to adopt a harder stance to Japan. Taiwan also will lose credibility: Suddenly, its harsh anti-communist rhetoric seems prophetic.

For now, though, the most burning question is who—if anyone—is really in charge in Beijing. Yang Shangkun, who holds the largely ceremonial title of President, has been among the most secure of China's leaders. But his relations with Deng go back to the late 1950s, when the two young Communist cadres served in the same military unit. They are longtime card-playing buddies.

China watchers such as the University of Michigan's Michel Oksenberg think it unlikely that Yang would be acting on his own without at least Deng's tacit approval. In view of Premier Li Peng's inability to run the country following the declaration of martial law, Deng apparently relied back on a network of personal contacts among old-guard military leaders in a bid to secure control. If Deng has been incapacitated, however, it is possible that Yang and his family are trying to steal power. In either case, says Oksenberg, "it's warlord politics of the 1930s."

Soon after solidifying control in Beijing's streets, the hardliners assembled a Maoist-era approach to the outside world. Spokesmen raved against "bourgeois liberalization" and euphemism implying criticism of



FORMER SECRET POLICE HEAD QIAO'S STAR IS RISING. MYSTERY SURROUNDS DENG



BEIJING RESIDENTS AWAITING SHIPMENTS OF GAS: SUPPLIES OF ESSENTIALS ARE DRYING UP RAPIDLY

hing foreign. Students were de-
ced as "counterrevolutionaries," a
se that harkens back to the dark
of the 1966-76 Cultural Revolution.
t ominously, Beijing Radio an-
ced Zhao's apparent replacement by
line Politburo member Qiao Shi, 65.
's former position as head of Chi-
secret police foreshadows a period
arsh repression in areas under cen-
government control. Zhao's where-
ts were unknown, but it was likely
he was being detained.

DEFIANCE. Also alarming was the
emergence of hardline elders who had
osedly retired. Peng Zhen, 86, resur-
l as head of China's Supreme Court.
w-and-order man since the founding
e People's Republic in 1949, Peng is
cularly skilled at leading purges
campaigns against his foes. Peng
Qiao seem to be at the center of
pts by hardliners, with backing
Yang's military forces, to reassert
ast a semblance of central control.
may be no small task, since this
inely unpopular government faces
defiance by its own citizenry.
e forces that stand in opposition to
ig are still unorganized and appar-
lack clear leadership. It's uncertain
er military commanders from dis-
e regions can agree among them-
s on a common approach. The 38th
—the force that initially refrained
attacking the students in Tianan-
Square—is believed to be angered
the bloodshed and is one of the units
has already skirmished with the

27th Army. Throughout the PLA, many
better-educated officers disapprove of
the government's old repressive ways.
Others, particularly in coastal areas,
have clearly benefited from economic re-
forms. The Guangdong military com-
mand, for example, has enjoyed a boom
in its income by exporting nonlethal
items. It even maintains a sales head-
quarters in the U. S.

Despite their lack of organization, the
opposition forces should not be dis-
missed. Indeed, many China watchers
believe that ultimately they will prevail.
"The hardliners are winning this particu-
lar battle, but I don't think they will win
the war," says Robert A. Scalapino, di-
rector of the Institute of East Asian
Studies at the University of California at
Berkeley.

Sheer numbers will work to the oppo-
sition's advantage. It's scarcely conceiv-
able that one military faction centered in
Beijing, no matter how brutal, could as-
sert effective control over the whole na-
tion. The vast majority of the population
is clearly opposed to the hardliners. So
even if the military quashed physical re-
sistance, seizing control of factories and
farms, the Chinese would probably re-
sort to their age-old method of passive
resistance: simply refusing to work.

Age is another advantage this emerg-
ing China holds over the old guard.
Deng, Yang, and Peng are all over 80,
and their days are obviously numbered.
The opposition, then, can simply outlast
them, even if outright resistance fails.
"The elders have lost their credibility

and legitimacy," says China scholar A.
Doak Barnett of Johns Hopkins Univer-
sity's School of Advanced International
Studies: "They can't hold on very long."

Still, the hardliners' grip on power,
however temporary, could exact a pun-
ishing price. "It means we're not talking
about thousands being killed," says one
veteran China trader. "We're talking
tens of thousands. Maybe half a million.
Those numbers aren't out of line with
the experience of this century."

LITTLE LEVERAGE. While the power
struggle in China continues, Western
governments will have to make some
tough choices. Bush's June 5 decision
succeeded, for now, in deterring Con-
gress from charging ahead with much
tougher measures. If pressed, though,
Bush might temporarily recall new U. S.
Ambassador James Lilley or impose
some additional but limited sanctions.
And for now, the Administration intends
to review all sensitive commercial sales
on a case-by-case basis.

But the cold reality is that Washing-
ton doesn't have much leverage. And the
Administration desperately wants to
avoid a full-scale break in relations that
successive Presidents have ardently cul-
tivated. One sign: Washington has can-
celed several high-level meetings be-
tween Chinese and U. S. military
officials, and plans for China's foreign
minister to visit Washington in mid-June
are in doubt.

Soviet leader Mikhail S. Gorbachev
also faces a sensitive policy dilemma. Al-
though Moscow is pleased that some of

the hardliners are decidedly pro-Russian, the Soviets dare not explicitly support one side or the other. "The Soviets have exactly the same problem the U. S. has," says William Taylor, a politico-military affairs specialist at Washington's Center for Strategic & International Studies. "If the Soviets speak out further than Gorbachev did at the summit in Beijing, they'll risk taking sides."

The most optimistic view among China watchers is that after a period of sharp and perhaps widespread conflict, Deng and his fellow hardliners will be overthrown and a reform-minded government will take over.

Zhao is the only known national figure the moderates could rally around. Although he is probably under detention, it is still conceivable that he, like Deng before him, could be rehabilitated and swept into power. Zhao once served as party leader of Guangdong Province, and troops in the region are thought to be loyal to him. Yet they are so far from Beijing—and so dependent on rail links that could easily be cut—that their potential as kingmaker is decidedly limited. More likely, a revolt in the provinces would lead to a devolution of power, given the centrifugal forces that have always threatened to tear China apart.

DREAM DEFERRED. At bottom, China has once again confounded the experts. And just as Americans in the 1950s debated the question, "Who lost China?," so now are they likely to debate the question, "Why were we so wrong about China?"

Dozens of so-called experts believed that drawing China into a web of economic, technological, and military ties with the outside world would prevent the Middle Kingdom from plunging back into internal struggle. As recently as a month before the dark days of May, many insisted that China was hitting only small potholes on the road to reform. "Probably, all of us hoped that the political transition would move more steadily to a more pluralistic society," says Dwight H. Perkins, a China specialist at Harvard University. "But that clearly has been knocked into a cocked hat for a while."

It's not Westerners' hopes, of course, that were most cruelly dashed by the bloodshed on the streets of Beijing. Ordinary citizens, as evidenced by their numbers, shared the dream of a society that is richer in ways both material and social. At the least, that dream is now deferred—and precious time has been lost in China's march to the future.

By Dori Jones Yang in Beijing and Dinah Lee in Hong Kong, with William J. Holstein in New York, Maria Shao in San Francisco, and bureau reports

FOREIGN INVESTMENT

HAS BEIJING BURNED ITS BRIDGES WITH BUSINESS?

Even if the crisis ends soon, the shocks will linger for years

Over the past decade, China's rush to modernize drew in some \$11.5 billion in foreign investment from Hong Kong, the U.S., Europe, and Japan. Now, as anarchy erupts in the capital and the threat of violence and repression spreads to the most productive manufacturing regions in the south, China's foreign investors and customers are running scared.

Some are operating plants with limited staffs, after withdrawing the foreign bosses. Others are shipping out machinery and half-finished goods, saving what they can. No one can say when and if they will ever return. "There's no reason to put money in if the government is going back to hardline nonsense," says James L. Ross, who signed a joint-venture contract to make computer disks with the Chinese only two days before

Beijing's bloody crackdown. "You'd be crazy."

The full-scale military upheaval engulfing China was supposed to be impossible. Now that it's happened, the key decision being made in New York, Tokyo, Hong Kong, and London is how quickly to get out.

Scores of companies are recalling expatriate managers—even from areas as yet unaffected by violence—leaving local Chinese partners to carry on by themselves. Many are temporarily withdrawing to Hong Kong, where toymakers, garment makers, and the distributors of cheap telephones, calculators, and radios are lining up alternative suppliers in Thailand, Mexico, and other low-wage nations. In the end, only a handful of giant multinationals, accustomed to working with military regimes, may have the fortitude to stick it out.

Whoever finally takes

charge in China not only must keep the basic economy functioning but also will be under severe pressure to export enough goods to finance China's imports of such essentials as steel, timber, aluminum, and fertilizer. Yet without foreign partners and the capital they bring, the task will become immeasurably more difficult.

CHECKING OUT? Some companies see the turmoil as an opportunity to extract better terms from the Chinese. The more common reaction, though, is to postpone planned projects back on the shelf. Japan's Nisshin Oil Mills Ltd., for example, is scrapping a plan for a vegetable-oil plant near Nanjing. Already facing delays, Portman Cos., the Atlanta-based developer, may be forced to halt construction of a \$175 million hotel, apartment, and conference-center complex.



★ MAKING TOYS IN SOUTH CHINA: SOME FOREIGN INVESTORS

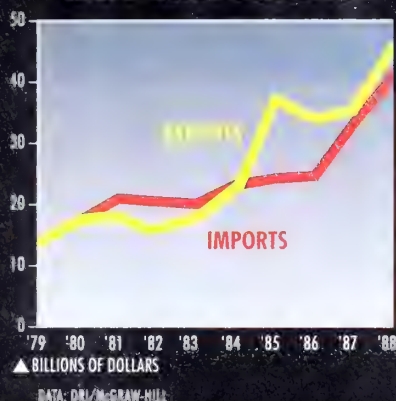
Shanghai scheduled to open in January. Dow Chemical Co. is now taking a wait-and-see attitude on a \$50 million ethane plant near Shanghai that's expected to begin operation in 1993. "Anything on the drawing board is now on hold," says Ko-Yung Tung, Pacific Rim coordinator with the law firm O'Melveny & Myers. "Even if [the strife] blows over, it will have a severe, lasting effect on foreign investment."

Westerners bankrolling China's development are also holding back. That's no small threat, since the country has borrowed some \$37 billion in recent years, but \$25 billion of that from Japan. Already, the World Bank has held up a \$1 billion agricultural loan and may suspend indefinitely \$700 million in other loans. A \$25 million Asian Development Bank loan to the People's Bank of China has also been shelved, as has a \$1 billion Japanese bank loan to Chinasinopet Petrochemical Co.

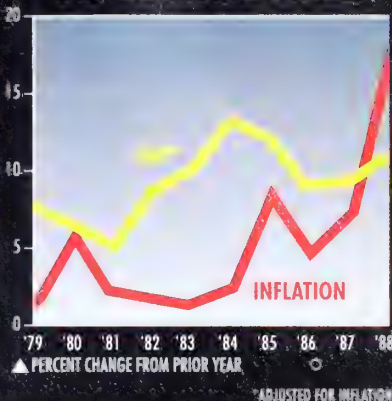
While future foreign-investment plans diminish, a more pressing concern is the fate of existing plants or ones about to be built. So far, most executives show little interest in writing off their China operations. General Foods Corp., for example, which makes tapioca, instant coffee, and orange mixes in joint ventures with Chinese partners in Tianjin, Guangzhou, and Dongguan, "is vigilant, but we're pulling out," insists the company's

CHINA'S 10-YEAR ECONOMIC EXPLOSION

EXPORTS AND IMPORTS HAVE BEEN SURGING...



...FUELING GROWTH BUT BOOSTING PRICES



Asia chief, George Kenneth Liu. "We hope the pendulum will swing to a more moderate position." Still, nerves are fraying. Asks Michael R. Oestreicher of Cincinnati law firm Smith & Schnacke: "How many companies that have know-how and technology the Chinese need will get frustrated and leave?"

LACK OF WORKERS. Indeed, production already has been hit hard. With public transportation idled and many workers afraid to venture onto the streets, Chrysler Corp., which makes Jeeps in a

joint venture in Beijing, says a third of its Chinese employees have not shown up since the government crackdown began. Electronics maker L. M. Ericsson's Beijing telephone-equipment plant has been shuttered, as has Philips' radio plant in the capital.

In the south, where the bulk of China's export industries are located, demonstrations in Shanghai have forced Volkswagen and other manufacturers to close for lack of workers. And apparel-industry sources say shutdowns and transportation bottlenecks are cutting off clothing exports. Not surprisingly, new orders have ceased. The impact could be felt quite quickly in the West: With few cheap-labor alternatives immediately available, says industry consultant Robert M. Frazier, manufacturing costs soon could jump 20%, sending retail prices higher.

Electrical-appliance makers also face problems filling their orders. One such company, Florida-based Windmere Corp., whose 10,000 workers in Guangdong account for 80% of the company's production, is moving inventories of hair dryers and other small appliances to Hong Kong in case the Chinese government seizes its factories.

Some importers, dependent on China, already are scouting other countries for new suppliers. Windmere may set up shop in Taiwan and Mexico. Also considering a move is El Paso-based Helen of Troy Corp., which relies on independent Chinese manufacturers for 90% of its \$68 million in annual sales of hair dryers and other personal-care items. President Aaron Shenkman says he is now looking at sites in Thailand, Hong Kong, Mexico, South Korea, and the Philippines. "Even if things smooth over in a couple of weeks," he says, "we will move some facilities out of China as protection."

Despite the darkening mood, some projects are continuing. A few days before the Beijing crackdown, American Telephone & Telegraph Co. agreed to establish a joint venture with the Chinese to make advanced transmission systems in Shanghai. "We are not in a panic," says George F. Tauber, AT&T's Asian market operations director. "We still regard China as a market for the future." Many others still share the dream, but fewer and fewer are placing their bets. Says Dow Chemical's acting China general manager, C. S. Chow: "It only takes a day or two to tear down something. But to restore confidence could take the Chinese three months, three years, or never." China's dream of a bright economic future suddenly seems a long way off.

By William Glasgall in New York, with Dori Jones Yang in Beijing, Dinah Lee in Hong Kong, Joe Weber in Philadelphia, Amy Borrus in Tokyo, and bureau reports



Y SET UP SHOP IN OTHER LOW-COST COUNTRIES

A COLONY LIVING ON THE EDGE OF CHAOS

With its very survival threatened, Hong Kong is trying to stave off panic



★ MOURNING: A HONG KONG DEMONSTRATION PROTESTS VIOLENCE IN CHINA

To be heard, there are times you must be silent.

—Old Chinese proverb

On June 7, an eerie silence filled Hong Kong as 6 million people joined in the first general strike there since 1925. It was meant to reverberate as far as the shattered streets of Beijing.

Deeply shaken by the massacre of thousands of compatriots in China's capital, the colony's residents shut down businesses and factories. Students boycotted classes, and for one full hour, the world's citadel of commerce halted in mourning for China's dead.

Underlying the dramatic protests is a deep anxiety: Not since the 1949 revolution has tiny, freewheeling Hong Kong, with its upscale discos, fleets of Rolls-Royces, and dozens of boomtown property magnates, sensed its geographic fragility so keenly.

A spit of land on the southern coast of China's expanse, the island colony depends on the mainland for such basics as water and food. So the prospect of civil war in China calls into question Hong Kong's very survival. When the flow of food across the border slowed in the

midst of the turmoil, alarm broke out in local food markets, prices soared, and fears mounted that supplies for Hong Kong would be cut off entirely. Spooked by the horror of the past few days, some residents have fled, and emigration could almost double this year, to 80,000.

Once the West's chief listening post on China, for the past decade Hong Kong has viewed itself instead as China's window to the West. It was to be the financial center for the emerging China. Confidence was the foundation: confidence in its real estate, securities, and sparkling economic future. Now, with the mainland poised on the precipice of widespread anarchy, Hong Kong's bubble has burst. Share prices on the stock exchange fell 22% in early June, and price-earnings ratios hit a 25-year low (chart).

Wealthy Hong Kong speculators who once snapped up bargains in a crisis are shunning the market altogether. And as business declines, the skyscrapers that were Hong Kong's

growth symbols could soon turn to steel stelae.

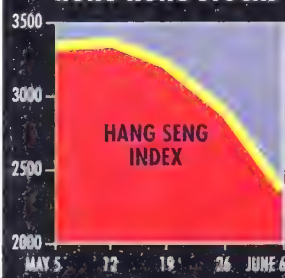
What's more, Hong Kong industrialists have poured hundreds of millions of dollars into factories and real estate in South China, knitting the two economies together as one. Fully 90% of Hong Kong's garment, toy, and electronic appliance companies manufacture across the straits in Guangdong. "If China goes down, the impact will be much worse than during the 1967 cultural revolution," says Patrick A. F. Gifford, CEO of Fleming International Investment Management Ltd. in London. Indeed, it could mean Hong Kong's fall from the ranks of Asia's Four Tigers.

NULL AND VOID. Fears of chaos spreading into Hong Kong have heightened worries about 1997, when China takes over the colony by agreement with Britain. Since the Beijing clashes began, calls to nullify the agreement have mounted. Small wonder: The treaty is long on promises by China to maintain the colony's economic and political status but short on tangible guarantees. Says Martin Lee, a Hong Kong barrister: "It is really frightening to think that under the Sino-British agreement, there will be no People's Liberation Army troops stationed in Hong Kong after 1997."

Prime Minister Margaret Thatcher has ruled out any possibility of renegotiating the accord. But the demands have been drawing some support, including from the British press. Says David Shambaugh, a China watcher at the University of London: "They could say the negotiations were based on a premise of continued stability and political liberalization, which is now null and void."

But whatever happens to political relations, Hong Kong's economy is now irreversibly intertwined with China's. Today, the mainland is Hong Kong's second largest export market after the U.S. for heavily produced goods, and this year, the colony is China's No. 1 trade partner. Over the last 10 years of China's

CHINA'S TROUBLES BATTER HONG KONG STOCKS



en-door policy, Hong Kong and Macao
ve directly invested some \$8 billion in
y-wage light industry, mostly in
angdong. That's nearly 70% of Chi-
s \$11.5 billion in foreign investment.
Hong Kong has in effect transferred
ch of its manufacturing capacity to
southern province, employing direct-
or indirectly up to 2 million Guang-
ng workers. That's why Hong Kong
estors fervently hope that clashes
ong People's Liberation Army fac-
s will be confined to the north. Says
analyst at Jardine Securities in Hong
ng, referring to a popular apparel
ker: "If Crocodile Garments can con-
ue to manufacture and export, then
ng Kong will be O. K."

ON DEPOSITS. Realizing their vulner-
lity, many Hong Kong people have
eady voted with their bankbooks. On
e 5, residents descended on the Bei-
g-owned Bank of China and its sister
ks to clear out their deposits, despite
arnings from the government and ac-
sts that such action would only harm
ng Kong. As the Communist banks—
No. 2 banking group in Hong Kong
p—Hongkong & Shanghai Banking
p.—restocked their teller machines
the hour, the colonial government
died interbank rates by injecting \$25
ion from reserves. The crisis could
elerate the steady stream of "yacht
ple" and capital out of Hong Kong
into Chinese communities in Vancou-
New York, and Los Angeles.

Chinese Communists based in Hong
g took the news of slaughter and
e in China the hardest of all. "These
le must be compared to a crazed
who turns his gun on his own wife
child before shooting himself," said
i Sung, a veteran pro-communist lo-
politician, on a prime-time TV pro-
n. Reporters and Communist bosses
China's aloof and mysterious New
a News Agency, which serves as an
fficial Beijing embassy in Hong
g, joined in the protest. A tearful
p of about 100 of the Communist
staff held a mock funeral service
une 5 on the busy pavement outside
offices, so all of Hong Kong could
ess their disgust with their own par-
y midweek, the Chinese flag over
gency was gone.

Whatever happens in China next, the
ing crisis there could mark the be-
ng of a long downhill slide for
g Kong. Granted, the island has re-
ded from previous shocks, as hap-
d after mobs rioted in the streets
g the early days of the Cultural
lution. But this time, if they're not
ul, the Old Guard in Beijing could
oy the jewel they have coveted for
ng—well before 1997 rolls around.

*Dinah Lee in Hong Kong, with Rich-
Melcher in London*

BANNERS, BRAVERY, AND BRUTALITY: A REPORTER'S PARTING LOOK AT BEIJING

*Little more than a day after the Peo-
ple's Liberation Army opened fire on
civilian demonstrators, BUSINESS
WEEK's Hong Kong Bureau Manager,
Dori Jones Yang, ventured from her
hotel for a final tour of Beijing.
What she saw and heard as she
weaved among the overturned trucks
and buses convinced her it was time
to leave. Here's her report:*

I spend four hours driving all around
the city. Signs of the devastating
battle are everywhere. It's clear
there were battles in the west, south,
east, and north parts of town, not just
in Tiananmen Square. At least half the
shops are closed. In
one place, I see people
lining up to buy vege-
tables—a sight I have
never seen in 10 years
in China. Obviously,
it's difficult to get pro-
duce into the city, be-
cause the roads are
blocked. Most people
don't go to work—be-
cause they can't get
there.

University campuses
are deserted, the
frightened students
having gone into hid-
ing. Hand-painted banners are draped
across the front gates of Beijing Uni-
versity, People's University, and the
University of Science & Technology.
The one in front of Beijing University
proclaims: "Blood has drenched China.
Brutality has reached its extreme."

I see no sign of troops near the uni-
versities, although I hear unconfirmed
reports that there had been firing
there. Outside People's University,
there is a floral funeral wreath and a
banner saying, "Their souls have no
place to go"—meaning the dead died in
vain. I also talk to Leong Ka Tai, our
Hong Kong photographer, who hap-
pened to get stuck here. He tells me of
a sign he saw on the way into town
from the Beijing airport: "The Yang
family army has bloodied China. Broth-
er soldiers, turn your guns around."

One Australian businessman I meet
in the crush of people trying to
buy a plane ticket tells me that
just two weeks ago, he had started a
joint venture to make Chinese sou-
venirs for sale at the Great Wall.
He figured it was a sure winner,
since the Great Wall is always packed

with tourists. But not these days.

An American I know was in the
square the night of the massacre.
When the troops came, she fell to the
ground. Six soldiers pointed rifles at
her. One prodded her in the back with
the barrel of his rifle and asked: "Is
she alive?" Seeing she was a foreigner,
they allowed her to flee. Then they
beat a Chinese youth until she inter-
vened to force them to stop. She and
the youth fled together.

A Chinese friend who went to two
hospitals yesterday says he saw a vic-
tim of the massacre being taken to the
hospital, brains dripping out of a single
hole in his head. He tells me: "They

underestimated the
bravery of the Chinese
people."

At the Beijing air-
port, starting from ear-
ly morning, a crowd of
desperate foreigners
and Chinese cram and
fight their way to the
standby counter of Chi-
na's national airline,
hoping against hope
for a seat on the first
flight to Hong Kong.
Americans, Europeans,
Japanese, Hong Kong
Chinese, Australians.

Businesspeople, students, teachers,
tourists, diplomats, journalists, moth-
ers with children. Even some lucky
Chinese who had visas to go abroad—
all are pouring into the Beijing interna-
tional airport. Hong Kong Chinese,
who have no diplomatic protection in
the People's Republic, are the most
frightened.

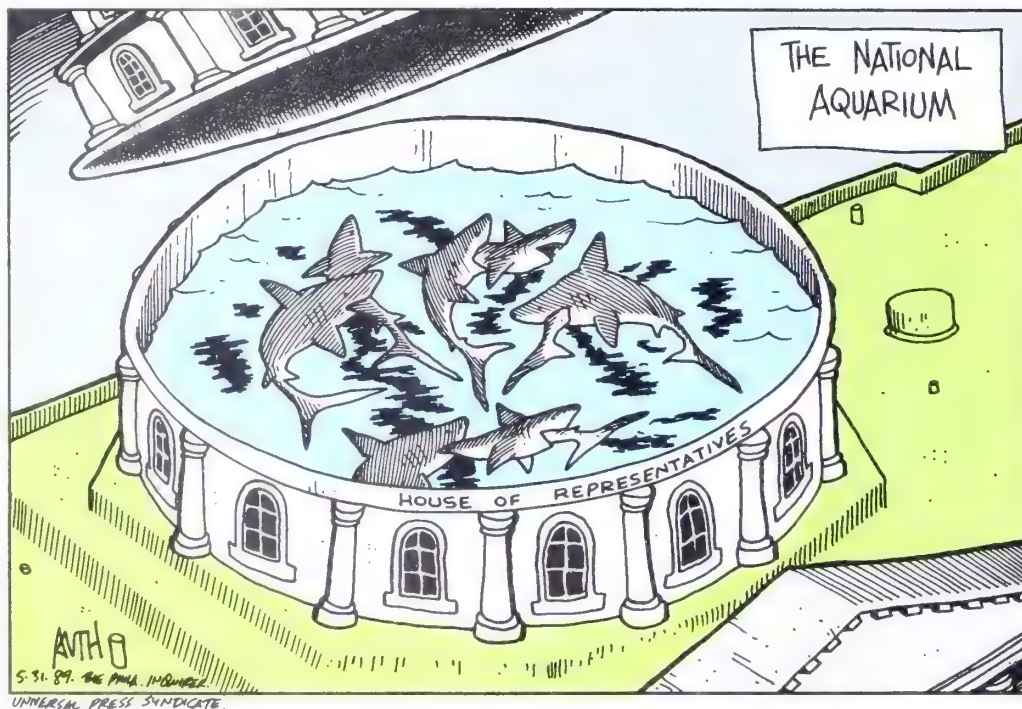
EERIE FEELING. Our bodies are crushed
together as more join from behind.
Two men come to blows when they
find out that last night's waiting list is
no longer valid. One turns away angri-
ly, blood dripping from his nose. I am
number 106 on a waiting list of more
than 150. Somehow, I get on the plane.

Three hours later, as the plane lands
in Hong Kong, the tension lifts and
passengers burst into applause. Says
one American: "It's good to be back in
a free country." For me, it's an eerie,
awful feeling. After many trips to Bei-
jing, so many parts of the city had
come to seem so familiar, safe, even
mundane. Now they are battle zones.
The China that I watched blossom for
the past 10 years seems to have died
overnight.



THE GOP FEEDING FRENZY IS FAR FROM OVER

FOLEY'S PLEAS FOR PEACE IN THE HOUSE ARE FALLING ON DEAF EARS



Thomas S. Foley hoped to turn his June 6 swearing-in into a celebration of the conciliatory course he intends to pursue as the Speaker of the scandal-scorched House. He moved to the Speaker's chair, passing a disgraced Jim Wright with a handshake but no words. Addressing a hushed House, the Washington Democrat pleaded with his colleagues. "It is time," he said, "to put divisiveness behind us."

But Foley's soothing words are unlikely to be heeded. As Democrats and Republicans stood together, their applause was tepid. That's because members on both sides of the aisle are coming to realize that the increasingly ugly atmosphere in the House goes far beyond normal sharp-elbowed partisanship.

'IT'S REAL.' The House is locked in a new and lethal sort of combat, in which allegations of unethical conduct are the weapon of choice. On the day of his swearing-in, Foley was the target of GOP attacks that hinted at personal impropri-

ety. It's war, and "it's real," crows Minority Whip Newt Gingrich (R-Ga.). "We finally have the public's attention."

Long frustrated, long ignored, and a little awed by their pivotal role in toppling both Speaker Wright and Majority Whip Tony Coelho (D-Calif.), Gingrich and a new generation of GOP commandos are going for broke. Their goal: seizing the House after 35 years of control by a Democratic Party that they'll attempt to paint as corrupt to its core. So sharp are the political appetites on the Hill that even the normally mild-spoken Representative Bill Frenzel (R-Minn.) denounced ex-Speaker Wright's

hand-wringing over "mindless cannibalism" as "the same way Adolf Hitler would describe his demise. There's no reason to believe anyone in the House is going on a witch hunt."

Clearly, one wing of the GOP has decided that the traditional collegiality of the House must give way to a polarizing struggle. "They guys are like kamikaze pilots," says Thomas Mann of the Brookings Institution. "They are prepared to crash their careers to break Democratic control of the House."

The GOP bombers will probably fall well short of their goal. In the meantime, President Bush and the Democrats can only wait as any hopes for their legislative agendas crumble. "This House is in a convulsive state," observed House Minority Leader Robert

Michel (R-Ill.). Yet even the well-liked Michel, a model of GOP decorum during his 33 years in the House, was hissed by Democrats when he declared that "5 years of uninterrupted power can act like a corrosive acid upon the restraints of civility and comity."

Michel and many GOP veterans are troubled by the course that Gingrich and his allies have charted. Even conservatives such as Representative Mickey Edwards (R-Okla.) think trying to make Democratic corruption a national issue is an iffy proposition. Says Edwards: "Voters will not make decisions on local congressional elections on the

PLAYING HARBALL: THE GOP'S PLAN

- ▶ Launch fresh ethics complaints against Democratic members based on information gleaned from new financial disclosure reports
- ▶ Trim the benefits of incumbency by limiting PAC contributions and reducing free mailings
- ▶ Demand floor votes on balanced-budget amendment and other controversial issues

DATA: BW

cretions of Wright
Tony Coelho.”
hanks in large part
Gingrich's tireless
suit, Wright will
ve the House at the
of the month, the
im of a year-long
es committee probe
his financial deal-
s. Forgoing the
th of a thousand
s, Coelho resigned
ctive June 15 rather
n face a probe into
investments.

ut the GOP's Young
ks believe they can
vince the public that
ght and Coelho are
ptoms of a deeper
ness. They have tar-
d up to 10 Demo-
s who, they say,
uld face ethics
es. The GOP fire-
ids will argue that
er has made the
ocrats hopelessly
upt. “It's the best
e we've got,” says
servative activist
ard Viguerie.

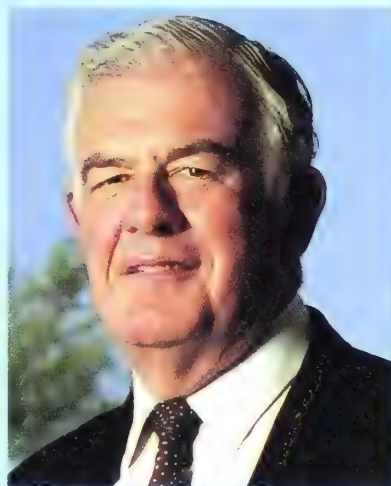
ley, a soft-spoken,
ing legislator from
ane, hoped to rise
e partisan rancor
vowed to restore a
t of “mutual respect” to the House.
olive branch: more cooperation with
e Republicans on scheduling votes,
ring amendments, and working out
minority by the autocratic Wright.

Y RAISE? But to Gingrich, “reform”
is a spate of measures aimed at
izing a complacent electorate and
ately driving Democrats from of-
fice (table). In coming months, the Re-
cans will push proposals to reduce
mailings for representatives,
ge campaign finance laws to trim
ibutions by political action commit-
-which donate mainly to incum-
—and raise the limits on individual
ions. The GOP will also push for
votes on a balanced-budget consti-
tial amendment and other issues de-
d to embarrass Democratic leaders.
e Democrats will try to regain the
ive. Their own ethics bill is likely
l for public financing of congressio-
ections. The measure probably will
eek to close a loophole that allows
ers elected before 1980 to convert
surplus campaign cash to personal
hen they retire. And it may offer a



THE BATTLE GOES ON

Republican Whip Gingrich (above) believes that the ethics issue will enable his party to gain control of the House after 35 years out of power. Most think he will fail, but the turmoil means that Speaker Foley can only watch as hopes for his legislative agenda crumble



Gray, who has put off until June 14 the election of Coelho's successor, is struggling to recover from reports that his office is under investigation for alleged payroll-padding. Justice says Gray isn't the target of the probe, but Democrats suspect that law-enforcement officials are part of a political conspiracy.

Their paranoia was hardly calmed when the Republican National Committee—headed by former Bush campaign chief Lee Atwater—circulated “talking points” entitled “Tom Foley: Out of the Liberal Closet.” The memo compared Foley's record on issues to that of Representative Barney Frank (D-Mass.), who just happens to be one of two avowedly gay members of Congress. Unstated in the document, but on the mind of everyone on the Hill, were ancient, unsubstantiated rumors about Foley's personal life.

The new Speaker

pay raise tied to the elimination of “honoraria”—payments for speeches before special-interest groups, a favorite way to pad legislative incomes.

President Bush wants no part of any Democratic agenda. And with no bold domestic program of his own at risk, Bush and White House strategists are content to allow Gingrich and his cohorts to stir things up. Says one White House aide: “Newt hasn't blocked a damn thing we want to do.”

The danger for Bush could be that things are spinning out of his control. Democrats are livid at Justice Dept. leaks that helped seal Coelho's fate and undermined the chances of House Democratic Caucus Chairman William H. Gray III (D-Pa.) to become majority whip.

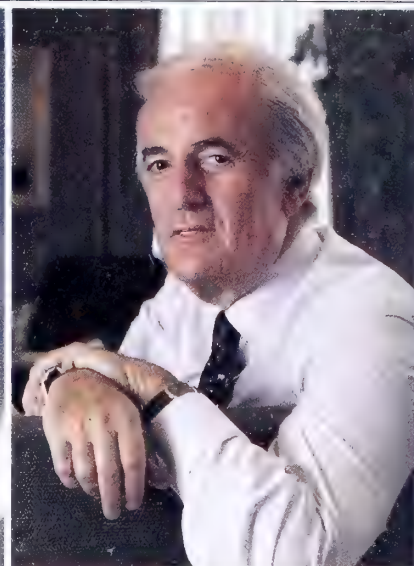
‘These guys are like kamikaze pilots. They are prepared to crash their careers to break Democratic control’

brushed off the attack as unworthy of comment. But other Democrats hit the ceiling. Says Representative Patricia Schroeder (D-Colo.): “The RNC has taken over. These guys in the House are just bit players, and they don't know it yet.”

Michel quickly criticized Atwater's RNC, calling the memo an “embarrassment,” and the author, Mark Goodin, promptly resigned. But Frank discerns a pattern: “What we're seeing is a campaign of character assassination.”

When George Bush took office, he went out of his way to make Democrats feel refreshed by a “new breeze” of bi-partisan cooperation. In fact, the President is sparing no effort to schmooze with Hill Democrats. But thanks to the take-no-prisoners tactics of some of his henchmen, the era of good feelings has come to a sudden end. In its place is a poisonous era unlike any in recent history. Until the mood is dispelled, Bush's prospects for a productive relationship with Congress are about as good as celebrated convict Willie Horton's chances for another prison furlough.

By Douglas Harbrecht, with Richard Fly, in Washington



PARAMOUNT'S DAVIS, TIME'S MUNRO, WARNER'S ROSS: THE COMING BATTLE WILL LIKELY BE A PUBLIC RELATIONS NIGHTMARE FOR ALL PARTIES

A NICE, SIMPLE TIME-WARNER DEAL WAS TOO GOOD TO LAST

Paramount puts in a blockbuster bid—and others seem sure to follow

When Time Inc. and Warner Communications Inc. unveiled merger plans on Mar. 4, their top executives described the deal as elegantly simple: Two U.S. companies, with compatible interests in magazine publishing, cable TV, books, films, and music, would do an old-fashioned, friendly stock swap. The deal would leave their balance sheets healthy, and investors wouldn't get hit with much in the way of extra taxes.

But around dinnertime on June 6, Paramount Communications Inc. Chairman Martin S. Davis picked up the phone and told the Time and Warner chiefs that he had something else in mind, a proposal that Time's shareholders would find simply elegant: Cash, and lots of it.

ANCIENT HISTORY. Paramount's stunning, \$10.7 billion bid for Time has made the Time-Warner deal, which had easily cleared most hurdles and was headed for a shareholders' vote on June 23, ancient history. Although Time lamely asked investors not to jump at Paramount's offer, the heirs of Henry Luce will have to work some special magic to persuade investors to stick with the company's current plan. It's worth

more than \$123 a share, while Davis is offering \$175—and could go higher. Says one publishing executive: "It would shock me if it didn't go to \$195."

Davis surely doesn't want to pay more, but he may have to if new bidders join the fray (table). Moreover, Time and Warner will undoubtedly try at least one of several options to defend themselves. One possibility is that they'll bid jointly for Paramount, which recently changed its name from Gulf & Western Inc. But on Wall Street you can almost hear the

arbs tapping their feet, waiting for more players to bid for Time, which last year collected revenues of \$4.5 billion. Time's stock sent Time stock soaring 44 points before close on June 7 at 170.

Talk on the Street is that several media and entertainment moguls are planning to operate some or all of Time's properties in magazines, books, and cable. The names most often mentioned are Cablevision Systems, General Electric, and Capital Cities/ABC. Other companies have also taken a serious look at Time, including Gannett Co., which was talking about a possible merger with Time before the Warner deal was announced. And CBS Inc. long has envisioned itself the role of white knight if Time was threatened.

But the TV networks—NBC Inc.'s offer, GE, among them—may run into some regulatory trouble if they go after Time.

FOUR SCENARIOS FOR TIME INC.

TIME-WARNER MAY OFFER A DIVIDEND Time and Warner would claim that a stock swap leaves a stronger company that's better able to expand. But investors who want their rewards now may prefer Paramount's \$175-a-share offer. To beat it, a Time-Warner dividend may have to exceed \$75.

TIME BUYS WARNER The additional debt needed to swing the deal makes Time unattractive to raiders. Shareholders would object, though, to a move that depresses Time's stock price while an attractive offer is on the table.

TIME OR WARNER GOES AFTER PARAMOUNT This could force Davis to pull back. But if not, Time remains vulnerable.

OTHERS BID FOR TIME Giants such as General Electric, Capital Cities/ABC, and CBS are known to be interested. Other rumored bidders: raiders Robert Bass, Carl Icahn, and Ronald Perelman.

Federal rules prohibit the networks from owning cable franchises. Some speculate that Time, with loads of dough and financial savvy at its financial services unit, could come at Time through the back door by buying a cable operator and programming it. But Time has a cozy relationship with NBC and GE.

CIRCLING SHARKS. Several financiers may also be tempted to make a bid for the company. The lure: assets that some analysts say could be broken up and sold for \$220 a share. Investment bankers are tossing around such names as Robert Bass, Carl Icahn, Ronald Perelman, and K-H Holdings, a leveraged-buyout firm created

former Macmillan Inc. chief Edward Evans and backed by the LBO czars at Berg Kravis Roberts & Co.

It's just as trouble lurks in the net-as-buyers scenario, so are there blocks to a raider-led deal. Any LBO would have to pay plenty in taxes. As far as the tax man is concerned, the assets carry a book value of just a share. A speculator who beat Da-ffer and wanted to squeeze out the Time's rich assets would have to pay capital-gains taxes on the difference. Time and Warner will surely try to convince investors that they'd be better off with a merger. The current Time-Warner proposal would create a strong company that offers shareholders money in the long run, they may say. Yet those words don't figure to sway the arbs and institutional investors who control most of Time's stock. They wouldn't agree to wait for their dividend, even if Time-Warner sweetened the deal with a special dividend.

THE BIND. If, as seems more probable, Time and Warner decide that the shareholders are already lost, the company might short-circuit the whole process. Time could just buy Warner, or vice versa. Either move would be expensive and risky, though. Time would probably have to pay about \$10 billion, or \$70 billion, for Warner, which last year sold \$4.2 billion in sales.

Worse, investors would object to a move that appeared to be motivated by a desire to protect executives at stockholder expense. Time Chairman J. Richard Co and President Nicholas J. Nichols might be hard-pressed to explain how shareholders were helped by a move that depressed the stock price at a time when an outside bidder had placed \$175 million in cash on the table. And Warner shareholders might wonder whether Chairman Steven J. Ross wanted to protect his generous salary and worth an estimated \$150 million a year. So this even more intriguing possibility is being rumored: Time or Warner could make a counterbid for Paramount. That way, directors of the companies could find it easier to approve their move.

A counterattack might make Davis off. But even if he kept coming, Time and Warner could point to the Paramount assets they might divide: Time's publishing operation would blend with Paramount's Simon & Schuster. And Home Box Office Inc., its cable-programming division, might pick up Paramount's one-half share in cable's USA Network. Warner, in turn, might pick up a leading producer of movies and TV shows, Paramount Pictures Corp., if the feds had no antitrust objections. It could take about \$9 billion, a share, to win Paramount, which

last year had sales of about \$3.1 billion, not including those from a huge financial-services arm that Davis is hoping to peddle for more than \$3 billion.

In virtually every scenario, the battle is likely to become a public relations nightmare for everybody involved. Time and Warner will probably paint Davis as an uncreative executive familiar with show-biz deals but lacking the credentials to manage some of America's most important publishing assets, including *Time*, *Sports Illustrated*, and *People*.

Indeed, shortly after Paramount announced its bid, Time said Davis had broken a vow to keep his hands off the company. Davis said there was no commitment once Time announced its deal with Warner—a move that he says effectively put the company on the block.

The outcome? That's anybody's guess, but one thing is certain: The forces set in motion by Davis' hostile bid for Time will shake up the power structure in American media and entertainment.

By David Lieberman in New York

TAKEOVERS



A McCAW TOWER: THE NO. 1 COMPANY OFFERED \$5.9 BILLION FOR NO. 7

THE CELLULAR BIDDING WAR WILL GET EVEN HOTTER

The Street expects McCaw's stunning offer for LIN to go higher

Craig O. McCaw just won't let up. Since 1984, the 40-year-old chairman of McCaw Cellular Communications Inc. has built the nation's largest cellular telephone operation through savvy acquisitions, heavy borrowing, and sheer nerve. But more than \$1 billion later, McCaw's widely scattered properties in small cities still lack the sweeping nationwide presence he craves.

Maybe not for long. On June 6, McCaw proposed the cellular industry's biggest deal yet: a \$5.9 billion tender offer for the 90% of LIN Broadcasting Corp. it doesn't already own. LIN is the No. 7 cellular company.

There's no telling whether McCaw's bid, rumored to be in the works since late last year, will succeed. But it's sure to accelerate the industry's fierce bidding wars. The \$120-a-share offer topped LIN's June 6 stock price by 16%. Yet, LIN's stock shot up 26, to 129½, the following day, indicating that investors

expect the bidding to go higher. And the Street figures the dealmaking won't stop there, judging from the flurry of cellular stock buying on June 7. Even McCaw's stock rose 3¾, to 47.

There may be few bargains left in cellular, though. At a valuation of at least \$275 per POP—industry lingo for potential customer—McCaw's offer doubles the price paid for any cellular property so far. "It's enough to make your nose bleed," says analyst Alfred J. Humphries of Hanifen, Imhoff Inc. in Denver.

McCaw knows no fear of heights. In just four years, he has managed to buy his way to the top of the industry, which provides mobile phone services. McCaw now has 50 million POPs, 68% more than No. 2 Pacific Telesis Group. It's easy to see why he wants LIN's 18 million POPs in New York, Los Angeles, Philadelphia, Dallas, and Houston (table). They're located in half the nation's top 10 cellular

markets and three of the top four.

But first he may have to outbid aggressive Baby Bells. In February, 1988, BellSouth Corp. beat out McCaw's bid for Mobile Communications Corp.'s 11-city operation, including Los Angeles, Milwaukee, and Houston. Bells rumored to be interested in LIN include PacTel, BellSouth, U. S. West, and Southwestern Bell. C. Lee Cox, president of PacTel's diversified businesses, plays it coy when asked what he would be willing to pay, saying only: "We can construct a scenario that supports those prices."

Here's the reasoning: This year, 3.3 million subscribers are expected to spend \$3.2 billion on cellular calls. As phone prices plummet, those revenues could double next year. And LIN is the last property on the market with a big presence in the top 10 markets. "LIN is [McCaw's] only chance to become a national company," says Dennis Leibowitz, a senior vice-president at Donaldson, Lufkin & Jenrette Securities Corp.

CASH CRUNCH. In making the bid, McCaw is stretching its finances ever thinner. Its \$1.8 billion in debt—87% of capital—requires interest payments of \$200 million a year. Last year, it lost \$297 million on revenues of \$311 million, and it lost \$98 million on revenues of \$102 million in the first quarter, ended Mar. 31. Moreover, cash flow from cellular operations, says Humphries, will be a negative \$125 million to \$150 million this year. That doesn't include LIN's positive \$90 million cash flow.

British Telecommunications PLC should relieve the cash crunch shortly, when it injects \$1.5 billion for a 22% stake in McCaw. And McCaw has \$1 billion left on a bank credit line. Analysts suggest British Telecom could arrange bank loans to cover the \$3.5 billion still needed to finance a LIN deal, or McCaw could issue more junk bonds.

McCaw probably would have to sell some of LIN's operations. The company says it has no plans to sell LIN's seven TV stations, valued at \$1 billion, but it may need the money. The problem is that LIN last month said it would spin off the broadcasting unit, a move that could make the cellular company more valuable and add capital-gains tax liabilities. McCaw has asked LIN to delay the spinoff.

If McCaw gets LIN, it will be under more pressure than ever to make its investments pay off. McCaw has spent \$392 million since mid-1987 to buy stakes in several other cellular companies, such as Cellular Communications, Metro Mobile CTS, and Graphic Scanning. Buying LIN may be Craig McCaw's biggest deal, but chances are it won't be his last.

By Robert D. Hof in San Francisco

INVESTMENTS

USX: ICAHN'S BACK, AND THIS TIME HE HAS THE CASH

The oil and steel giant's soaring breakup value may prove irresistible

In the fall of 1987, a year after Carl C. Icahn mounted an attack on USX Corp., he called a top lieutenant at the steel and energy company with a message for Chairman David M. Roderick. Icahn was ecstatic that Roderick's restructuring of USX had boosted the value of his 11% stake by more than \$15 a share. "Anybody who can make me a \$450 million profit is my friend for life," he enthused.

Times have changed. Icahn, who dropped his bid for USX in part for lack of financing, is now far richer. And USX's breakup value has soared above what he or top USX executives imagined.

That's why some on Wall Street began speculating he would make a new run at USX even before the June 1 sale of his huge block of Texaco shares. That same day, Charles A. Corry, 57, USX's top strategist, succeeded Roderick as chairman.

Such speculation has focused attention on the value of a revived USX. Although its share price has jumped since late 1986 by about \$7, to \$36, oil analysts' estimates of USX's breakup value have risen even more (table). To fill that "value gap," analysts figure Corry may have to proceed with USX's long-delayed plan to spin off part of its steel business to the public or even sell natural gas assets. "Corry needs some prodding," says Andrew Gray III, an analyst at Donaldson, Lufkin & Jenrette Securities' Pershing Div.

SPLITSVILLE? Icahn aims to do some poking. He could sell his shares at a handsome profit now but believes he could reap more by pushing Corry to split USX into separate energy and steel concerns. Icahn still sees "great value" in USX, says one source familiar with his investment, adding that Icahn will dine with Corry soon to discuss a restructuring.

And today, "Carl would have no trouble taking USX out," says Frederick P. Leuffer, an oil analyst at C. J. Lawrence. He's flush, with up to \$2.6 billion in

cash, largely from his Texaco shares, could use just a fraction of that to double his stake in USX to lure another suitor. Or he could leverage it all to borrow and buy the entire company for \$12 billion, a 30% premium.

USX is ripe. The steel unit was once a biggest defense against a raider at USX's rich Marathon Oil Co. and Texas Oil & Gas Corp. assets. But now, profit-gushing steel operations will push this year's net income up 26% to \$950 million. Then there are the energy units, valued at \$12 billion, or \$2.8 billion more than USX's market value. Marathon's refining profits are soaring.



ICAHN: FLUSH

HOW USX HAS IMPROVED

	1986	1989
BREAKUP VALUE, NET OF LIABILITIES	\$8.84 billion	\$13.25 billion
NET BREAKUP VALUE PER SHARE	\$34.25	\$51.00
MARKET VALUE PER SHARE	28.75*	36.13**
VALUE GAP	5.50	14.87

*1986 fourth-quarter high

**June 6, 1989, close

DATA: C. J. LAWRENCE, MORGAN GRENELL INC., BW

like most big oil companies, Marathon North Sea fields guarantee rising output and reserves for years. Also, profits Texas Oil & Gas are expected to surge in 1990, as natural gas prices pick up.

Even USX's stiff defenses won't help. A takeover could spur bankers immediately to call in \$5 billion in debt, boosting the initial cost to \$17 billion. But strong are USX's fundamentals that several analysts say a suitor could easily raise the money to pay it off. USX is still pumping out \$1 billion in cash a year through 1992, even after capital spending and dividends. An outsider "could easily justify even a leveraged buyout," says David N. Fleischer, an analyst at Prudential-Bache Securities Inc.

Thus, the sight of a cash-rich Icahn may force even Corry to restructure far more than he expected to in his maiden year at the company's helm. Icahn warmed up to Roderick, but Corry may soon find Icahn a bit chilly.

By Gregory L. Miles in Pittsburgh, and Todd Vogel in Stamford, Conn.



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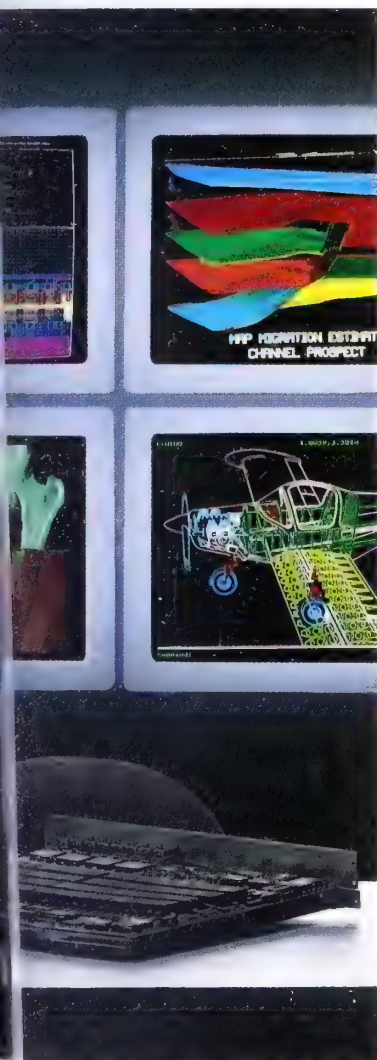
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Technologies:

test processor chips, for companies rformance to their products.



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In only seven years, Sun has shipped more than 150,000 workstations. To maintain such leadership, Sun expects us to help them "push the technological envelope."

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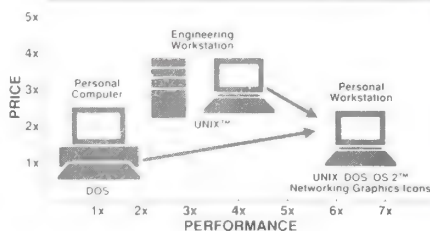
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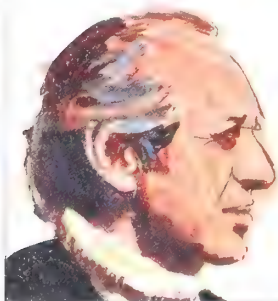
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Alvin Toffler
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EDITED BY HARRIS COLLINGWOOD

RJNABISCO LOADS SOME DEBT

Moving fast to reduce its nearly \$24 billion in debt, RJNabisco on June 6 sold most of its international cookie and fruit business to BSN, a French food and beverage producer. At \$2.5 billion, proceeds from the sale of its French, Italian, and British cookies fetched some 25% more than analysts' highest estimates, hurrying the company along in its goal of reducing debt by some \$5.5 billion within the next year. Other likely divestment candidates now include Del Monte's 20% stake in ESPN, Chun King frozen food and pieces of its candy business. But since the tropical fruit business is highly cyclical and the canned goods sector is in decline, RJN may opt to reduce what's thought to be a \$3.5 billion tag price for Del Monte.

AMGEN GETS A JUMP IN THE COMPETITION

Amgen won Food & Drug Administration approval on June 1 to sell EPO, a bioengineered drug that stimulates production of red blood cells. Wall Street thinks the anemia agent may even be worth \$1 billion a year in sales. Genetics Institute has also obtained a patent for EPO, but Amgen is going to market with its version at least six months before the competition. In the two days after receiving approval, says CEO Gordon R. Sear, the company shipped millions of dollars' worth of drug, which retails for \$250 per dose.

FOR PERFORMANCE AMERICAN AIRLINES

American Airlines has brought new ground. On June 2, 10,000 ground personnel employed by the Transport

Workers Union ratified a contract for ground crews, mechanics, and baggage handlers that tied pay hikes to performance. A baggage handler, for example, could earn pay increases by getting luggage to passengers more quickly. No other airline has such an incentive structure.

Trend-setting labor contracts are nothing new for American. In 1983, American signed an agreement with ground workers that introduced the industry to two-tier pay scales. Beyond incentive pay, the latest contract makes American's mechanics the highest-paid in the industry. Undoubtedly, the other airlines will be watching.

A WINNING RAIL DEAL FOR BLACKSTONE

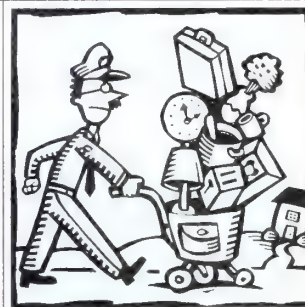
► Blackstone Group, a fast-rising Wall Street merchant bank, has come to the rescue of CNW. On June 6, Blackstone and top management at the railroad announced a \$50-a-share leveraged buyout valued at \$950 million. The buyout dashes a \$747 million hostile bid by Japonica Partners, a New York investment group that has pursued the railroad since April. Also backing the LBO are Donaldson, Lufkin & Jenrette Securities and Union Pacific.

For Japonica, the taste of defeat was sweetened somewhat by a \$30 million pretax profit on its 8.8% stake in

WHERE DO YOU PUT THE STAMP ON A SCORPION?

And you thought the U.S. Postal Service handled only prosaic items like letters, books, and small parcels. Not so. Along with that birthday card for Aunt Tillie, your friendly letter carrier will also take the cake. If you're on a tropical vacation and want to make the folks back home green with envy, feel free to mail them a coconut, as long as you make one thing perfectly clear: the address label. Or how about a new twist on the poison-pen missive? The Post Office accepts scorpions, although for some reason it frowns upon tarantulas.

Michael Levine, who discovered these fun facts while researching *The Address Book: How to Reach Anyone Who's Anyone*, points out that you can also use the mails as a moving service. One woman saved thousands of dollars by posting her household goods from Florida to Panama. But don't send the house itself. That has been illegal since 1916.



CNW. As for Blackstone, it will gain a controlling interest in CNW. Last year, Blackstone engineered another rail deal: the \$600 million buyout of USX's rail and shipping lines, now operating under the name Transtar.

SUN MICROSYSTEMS: A STAR SLIPS

► Sun Microsystems, the sizzling maker of engineering workstations, stumbled for the first time in seven years of meteoric growth. The company warned on June 1 that it may report a loss for its fourth fiscal quarter ending June 30.

The transition to an entirely new product line in April caused a serious imbalance between inventory and orders for both old and new products. At the same time, glitches in a new management information system and a component shortage slowed production of a new workstation, reducing anticipated revenues for the year by about 5% to \$1.8 billion—still up 75% from 1988.

CONISTON WRAPS UP TW SERVICES

► After an eight-month takeover tussle, TW Services caved in to a sweetened \$34-a-share bid from Coniston Partners. Coniston, which owned 19% of TW before raising its offer from \$29, will initially claim 80% of the company in a deal that values all of TW at \$1.7 billion.

The deal surprised Wall Street, which has been skeptical of Coniston's intentions all along. Coniston insists it wants to keep TW's food service units—Canteen, Denny's, and Spartan Food Systems—which accounted for 94% of TW's 1988 sales of \$3.6 billion. Look for American Medical Services, a tired nursing home company, to be divested.



Why 1-2-3 users are computers for the s



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It first happened about six years ago.

When you made the jump from paper ledgers to something called the PC.

If you'll recall, that little box, coupled with

convinced the thrill was gone, a situation comes along to prove the exact opposite.

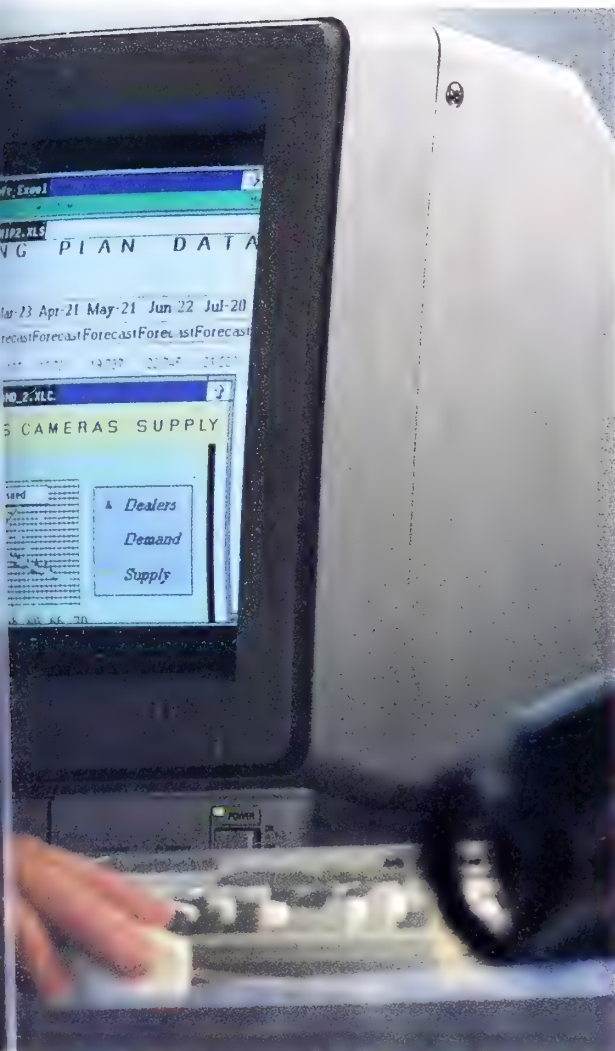
Briefly:

Character-based technology is being replaced by the remarkable power and simplicity of graphical environments: It's no secret that the PC industry is moving rapidly



Finally, output that's admired, enjoyed, and saved. Not tossed.

covering and time.



ard graphical platforms like Microsoft® Windows, MS® OS/2 Presentation Manager, of course, the Macintosh®. It's a simple reality. Which means serious spreadsheet users are suddenly faced with a decision.

Stay with 1-2-3, the current character-based standard. Or move to Microsoft® Excel for Windows, emerging standard designed expressly for graphical environments. Graphical as in

the simplest, most visual way to harness the power of the 286/386 machines—which in turn lets you easily tap all the power and glory of the spreadsheet.

We're not saying it's an easy decision. Just an inevitable one. And to help you make a more informed one, we offer the following:

Microsoft Excel lets you link multiple spreadsheets without the hassles of complex cell references—to link, you just point and click on the cells you want linked. That's it.

With Microsoft Excel you can work interactively—you can change fonts and sizes, add borders, shade areas, and see it all on screen. And, thanks to Print Preview, see exactly what you've done, *before* making a trip to the printer.

You can also create charts with a single keystroke. Make mistakes and simply "undo" them. Even adjust column widths or color without a laundry list of commands.

And no, your equity in 1-2-3 is not lost. Because Microsoft Excel actually reads and writes 1-2-3 files, guides you with 1-2-3 on-line help, and even helps you translate 1-2-3 macros. So making the switch is easier than you think.

All of which brings us back to the decision—and a simple fact: You have nothing to lose by calling for a free, fully functional Working Model of Microsoft Excel for Windows to use in a real-life situation. Yours.

It's the only way to fully appreciate the power of Microsoft Excel. And the quickest way to rekindle your long-time love affair with the PC: (800) 323-3577, Dept. J51.

We strongly suggest calling. Because if you think going from ledgers to computers was a thrill, you haven't seen anything yet.



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HOW BUSH IS KEEPING THE RADICAL RIGHT INSIDE THE TENT

Annah D. Atkins and Robert Fulton work only a floor apart in the Oklahoma statehouse. But Atkins, Oklahoma's secretary of state, and Fulton, secretary for social services, have more in common than their work for Republican Governor Henry Bellmon. Both were in line for Bush Administration jobs. And both were blackballed by the GOP right. Atkins and Fulton aren't alone. One of the little-noted stories of the "kinder, gentler" Bush Administration is the new President's willingness to appease the right wing of the GOP. In fact, all Presidents have to offer an occasional human sacrifice to quiet angry constituent groups. Bush, who has been around Washington long enough to know the game is played, hopes that giving in to some low-level jobs will allow him to move his way on more important matters.

LESS CAUSE. White House Chief of Staff H. Sununu, Bush's conduit to the right, is really the man who wields the hatchet. Conservatives take their hit list to Sununu, who has no problems about playing the heavy. "When he speaks, the President understands that he represents the views of conservatives," says Michael Parenti of the Free Congress Foundation. Sununu helped torpedo Fulton's nomination as director of the Family Support Administration, although Fulton was recommended by Health & Human Services Secretary Louis W. Sullivan. The rap on Fulton? Abortion groups charged that he failed to defend the rights of severely handicapped children to life-prolonging medical treatment. Fulton denied the allegation, but he withdrew. It became obvious it was going to hurt Sullivan more if I don't," Fulton says.

Conservatives won another scalp when they blocked Atkins' nomination to the Consumer Product Safety Commission, the highest-ranking black in Oklahoma government and in line for a CPSC seat reserved by law for a Democrat. Her undoing was her onetime membership on the board of the American Civil Liberties Union. "It's a little too much to

put forward a candidate who is associated with groups that President Bush ran against," says Jack N. Gerard, an aide to Senator James A. McClure (R-Idaho).

Attorney General Richard L. Thornburgh, whose early moves have pleased the right, has run into trouble over his choice of former New York U.S. Attorney Robert B. Fiske Jr. as his deputy. Opponents say Fiske helped block conservative judicial nominees as chairman of an American Bar Assn. screening committee. Fiske has been courting GOP senators, but his nomination remains in doubt.

Secretary of State James A. Baker III, whom the right has long viewed with suspicion, has played the sacrifice game deftly. He fought off conservative assaults against Deputy Secretary of State Lawrence S. Eagleburger, a longtime associate of Henry A. Kissinger. To minimize trouble, Baker dropped another former Kissinger aide, Robert D. Hormats, from consideration as Under Secretary for economic affairs. The post went instead to Richard T. McCormack, once an aide to Senator Jesse A. Helms (R-N.C.).

Hardliners also claimed a victim at the National Security Council when they kept career diplomat George F. Jones out of a key Latin America post. The job went to Everett E. Briggs, a former ambassador to Honduras who is popular with anticommunist groups.

Bush has been more than willing to make a few personnel concessions to the right as long as the stakes are low. But he waged a fierce fight to protect the nomination of HHS Secretary Sullivan, whom right-wingers attacked as soft on abortion. The bones Bush has tossed to conservatives have been enough to keep activists in the tent, where the President needs them for battles to come. Says Gary Bauer, president of the Family Research Council of America: "The White House understands that there are going to be a dozen fights where they're going to need the conservative grassroots."

By Richard Fly



SUNUNU: POINT MAN

AL WRAPUP

IRONMENT

The Bush Administration will soon unveil a 50-point plan to get the Superfund toxic-waste cleanup program moving. Under the program put together by William K. Reilly, Administrator of the Environmental Protection Agency, the EPA would be more aggressively to hold companies to their schedules to clean up the sites. The plan also calls for greater involvement by state and local governments and more use of new technologies. Reilly plans to increase Superfund's technical and legal staff by 50% above a large increase already requested, to be paid for by redirecting

existing EPA funding. Reilly's new Superfund blueprint, which requires no new legislation, is being drawn up as Congress begins to consider reauthorization of the \$8.5 billion program.

THRIFTS

Republicans are proving more troublesome than Democrats as Bush's savings and loan bill moves through the House. Industry lobbyists, who argue that tough new capital requirements would kill many thrifts, have succeeded in peeling some GOP support away from the measure. Both House leaders and the Administration fear that the bill can't survive intact without broad bipartisan support.

PENSIONS

Bush's choice to head the Labor Dept.'s pension office is being held hostage to a dispute over how companies can use excess money in their pension funds. Senator Howard M. Metzenbaum (D-Ohio) has put a hold on the confirmation of former Amax Inc. Senior Vice-President David G. Ball to be Assistant Secretary for pension and welfare benefits. Metzenbaum, who wants restrictions on so-called pension reversions, is waiting for Labor to adopt a new position on the issue. Business groups worry that Labor Secretary Elizabeth H. Dole may give too much to ensure Ball's confirmation.

**WALESA: SOLIDARITY WANTS
TO SHRINK THE GOVERNMENT**



POLAND

SOLIDARITY HAS NO TIME TO CELEBRATE

The victorious union must now wrestle with the ills that have brought Poland to its knees

As the polls opened on June 4, Gary Cooper in a sheriff's outfit, ballot in hand, looked out from wall posters along Warsaw's drab streets. His image dramatized a showdown: "Election '89—At High Noon." The electoral face-off between Solidarity and the Communist Party was the first partly free election in more than 40 years in Poland or anywhere else in Eastern Europe.

By the time the polls closed, Polish voters had upset not only the election forecasts but the Marxist political monopoly. Poles registered their bitter hostility to the ruling party by giving candidates of Solidarity, the recently legalized labor union, almost all of the newly created Senate's 100 seats and 160 of 161 contested seats in the 460-member Sejm, or lower house of parliament.

In talks earlier this year, Solidarity had agreed that the Communists could

reserve 65% of the seats in the Sejm. But voters rejected most candidates for these seats by crossing their names off ballots. Many can try again in a June 18 runoff election. But voters also turned thumbs down on most of the 35 candidates on an unopposed "national list," including top officials. They are ineligible for the runoff and could be barred from the next government. "The government thought the election would give them another card to play, but it took their whole hand away," said newly elected Senator Ryszard Bugaj, an economist and adviser to Solidarity.

ANXIETY AND ELATION. Now that the Poles have taken a long step toward political pluralism, they are looking for help. It could come soon. President Bush plans to visit Warsaw on July 10-11, and he may pledge support for action by foreign government creditors to reschedule payments on Poland's \$38 billion debt. If

the election starts a process of overhauling the economy, Poland may also qualify for big new credits: up to \$350 million a year from the International Monetary Fund for economic restructuring \$300 million this year from the World Bank to boost Polish export industries.

But the lopsided election victory, causing as much anxiety as elation for Lech Wałęsa and other Solidarity leaders, because it raises the danger of a violent backlash from the Communist Party. Nevertheless, "the election was a substitute for civil war," says Solidarity adviser and historian Bronisław Gilek. Adds newly elected Senator Witold Trzeciakowski: "We have to live with s.o.b. Communists, and they have to live with us. We are condemned to find a common solution together."

To refurbish their legitimacy, Communists urgently need to reorganize the party and look for ways to w

the opposition. Solidarity's support is still vital because economic reforms will mean the jobs and living standards of many Poles. But Solidarity leaders are still figuring out how to wield their new power while staying in the opposition. For now, they may demand the firing of Communist officials as their price for working with the Communists.

The biggest boost to the economy, if Solidarity and the Communists are able to cooperate, will come from reversing the negative spiral of political conflict and economic stagnation that began with workers' strikes in the late 1970s. Whether such a cycle of hostility could lead to an economic disaster. Since January, industrial output has plunged, inflation has jumped to 150%, and food is running short. "The economy will collapse in three to four months if nothing is done," says Dariusz Rosati, director of Warsaw's Institute for Foreign Trade.

To reverse Poland's economic slide, Solidarity leaders will propose an austerity plan that includes sharp cuts in defense spending and the bureaucracy. They would also replace state control of the industry with self-management by worker councils, establish employee ownership plans, and revive capital markets.

MARKETS. But before cutting food subsidies or closing factories, Solidarity wants to shrink the government. "How do you tell people to accept tough reforms if the government is flagrantly mispending?" asks economist and Solidarity adviser Jan Mijdzal. Money-losing enterprises shouldn't automatically be shut down, Solidarity economists argue, since they may be caused by manipulations of Communist officials, not market forces. They will have to carry out bankruptcies, but not until a real market exists," Mijdzal says.

Between now and the next national election in 1993, the Communist Party is likely to split, while groups of Solidarity candidates form their own parties. That will leave Solidarity to reassert its primary role as a trade union. In the meantime, if cooperation between Solidarity and the Communists produces a viable economic strategy, Western governments will be more willing to compromise of help into hard cash. Even now and mid-July, Polish leader Jacek Jaruzelski will meet with heads of state or senior officials from West Germany, France, Britain, and Italy. Hopes are high that President Jaruzelski, following his visit to Warsaw, will make a proposal for aiding Poland to the next economic summit in Paris later this week. A big package of such help from the West could ease the sting of the Communist and Solidarity victory.

By Gail E. Schares in Warsaw

THE HOTTEST COMPUTER COMMAND IN EUROPE: MERGE

The Continent's slumping computer industry is facing a major shakeout

As a building block for a more modern European market, few industries are more important than computers. But in the past several months, something has gone very wrong with the Europeans' plans for broad-scale computer manufacturing. Facing blistering competition from the U.S. and Japan, the industry now looks as if it will be shrinking fast.

With some big European computer makers already spilling red ink, the pressure is building for mergers. "Everybody is talking [deals] with everybody else," says Jorma Ollila, a senior vice-president with Finland's Nokia. The betting is that only three or four of the national companies will survive, he says. **IN A RUSH.** Even the ones eking out profits are faced with having to spend big to keep up technologically and maintain market share. Along with IBM, such other U.S. companies as Digital Equipment, Apple, and Compaq are setting a fast

pace. Both companies have cut costs and expect to rebound this year. Even so, many analysts figure one or both companies may be forced out of computers—as Sweden's Ericsson was last year when it sold out to Nokia.

Nixdorf and Norsk Data aren't the only ones at risk. Nokia has been losing market share in the crucial Swedish market. Profits are sagging at Britain's Amstrad. Rival ICL is solidly in the black but may not make it without help on the Continent. Olivetti's new chief operating officer, Vittorio Cassoni, split the Italian company in three parts, largely to "ideally position" it for dealmaking during the shakeout. But analysts suspect that Cassoni may spin off parts of Olivetti if he can't get profits humming.

European governments don't want companies in such a key industry to become dependent on foreigners, and U.S. or Asian buyouts would be politically unacceptable. "We will see a lot of partner-

ships in Europe based on sharing technology and distribution," says Norsk Chief Executive Rolf Skår.

But that's unlikely to be enough. Although most European computer makers now have some form of protection from takeover, mergers may be the only way to prosper in a global industry. One likely formula is 50-50 joint ventures among weaker players, modeled



on the merger of France's Thomson and Italy's SGS in semiconductors two years ago. Europe's two biggest electronics companies, Siemens and Dutch giant Philips, are said to be scouting computer acquisitions. "The European industry is definitely entering a phase of restructuring," says Hank Powell, an analyst with Nomura Research Institute in London. The main question is who's going to get restructured by whom.

pace. To counter this onslaught and with Europe's 1992 open-market initiatives looming, all the Europeans need to get bigger in a hurry. Some European computer makers are already hurting. After posting double-digit annual growth in profits through most of the decade, West Germany's Nixdorf Computer lost \$75 million before taxes in the first quarter, on top of a \$30 million pretax loss on sales of \$2.7 billion in 1988. Norway's once speedy Norsk Data also hit the wall last year, losing \$46.6 million on sales of \$435 mil-

lion. Both companies have cut costs and expect to rebound this year. Even so, many analysts figure one or both companies may be forced out of computers—as Sweden's Ericsson was last year when it sold out to Nokia.

By Thane Peterson in Paris, with Jonathan Kaptein in Brussels and John Templeman in Bonn

'SUBSIDY' BECOMES A DIRTY WORD

To spur fair competition, the EC is taking deadly aim at state aid

It's a nasty spat between Brussels and Rome on an issue certain to include other European Community countries. Sir Leon Brittan, the new European Commissioner for Competition, started it on May 31 when he ordered Alfa Romeo, the maker of sports cars, to repay \$420 million in state aid received in 1985 and 1986. Outraged Italians are calling for Brittan's head. "[Brittan is] a sheriff going after outlaws in the Wild West," screamed Milan's respected newspaper *Corriere della Sera*.

The tiff over Alfa is just the first flare-up in what could become 1992's most explosive issue. To create a more level playing field for market unification, the European Commission is hacking away at billions of dollars in state subsidies. Millions of jobs and a lot of national prestige are riding on support payments to such old-line industries as steel and such national champions as autos and computers. If Brittan prevails, industrial restructurings and cross-border mergers are sure to occur as companies scramble to survive.

SEVERE SETBACK. Alfa is by no means the biggest name to come under scrutiny. In France, the EC is investigating the government's decision last December to forgive \$1.8 billion in debt owed by state-owned auto maker Renault. The EC is also probing a contract between French power authorities and state-owned aluminum maker Pechiney to provide electricity at half the normal industrial rate for a new smelter at Dunkirk.

Since the EC began campaigning against the subsidies in 1983, it has ordered \$1.14 billion in paybacks in 26 cases. Intensifying the effort, Brittan is expected to seek \$1 billion in payments this year alone. Brittan believes the EC must be the umpire. "Only the commission stands in the middle and tries to hold a fair balance," he says.

More than fair play is at stake. In France, a ruling against Pechiney would deal a severe setback to government plans to build the company into Europe's leading aluminum and can producer.



A CLASH BETWEEN THE EC AND ALFA HAS OUTRAGED ITALIANS

Likewise, if Renault is forced to pay back its government debt, the company's profits will be slashed. Brittan's demands for subsidy cuts at Italian steel-maker Finsider could force plant closures and may lead the company to seek partners outside Italy.

Many French, Italian, and Spanish politicians argue that state planning and subsidies must continue if European industry is to survive the coming global competition. Brittan, a former British Industry Secretary, shares Prime Minister Margaret Thatcher's free-market vision. But Brittan is clearly outgunned on the Continent and will have a tough time reducing subsidies.

By Jonathan Kapstein in Brussels, with John Rossant in Rome and bureau reports

WORLD TRADE

WHY OPEC'S LUCK MAY RUN OUT

New squabbling could spoil an unexpectedly buoyant market

No doubt about it, OPEC has had a great season. A series of mishaps in the North Sea and a temporary halt in Alaskan shipments because of the Exxon Valdez spill have kept non-OPEC oil supplies low. And economic strength in the industrialized world, from the U.S. to Japan, has given demand an unexpected boost. That adds up to buoyant crude oil prices—up

around 50% from last year's lows—an new lease on life for OPEC.

To keep that winning streak going, though, the oil cartel's 13 members have to resist the urge to pump up production too fast. But the will to restrain is lacking at OPEC's biannual summit, which ended in Vienna on June 7. The meeting was marred by squabbling and political jockeying—and that could spark increasing turbulence in world oil markets over the coming months and further problems in the already depressed oil patch. Spot prices dropped sharply at the end of the meeting because no one expects the new 19.5 million-barrel day quota to stick.

CHEATERS. Industry watchers are worried that attempts by OPEC members to increase their individual market shares could lead to a repeat of the 1986 price war, when a tidal wave of oil caused prices to sink below \$6 a barrel. OPEC is producing almost 2.5 million barrels a day more than the 18.5 million ceiling set last November. Even OPEC king Saudi Arabia has shown little restraint.

Kuwait, whose daily production is close to 1.8 million barrels now, is one of OPEC's most blatant output cheats. Granted only a slight increase in its quota, the Kuwaitis are expected to continue to overproduce.

Looking ahead, OPEC will have to deal with a surge in supply. North Sea production, which has been slowed by 500,000 barrels a day by last summer's Piper-Alpha explosion and by technical problems, will recover over the next few months. More important, Iraq will begin much of a planned 2 million barrel a day in added capacity available as early as August. Iran is also intent on producing every drop it can.

On the demand side, no one is willing to predict when the party will start to wind down. The experts say that U.S. oil demand will increase more than this year, with much of that met by OPEC. The European economies are on a roll. And the "Little Tiger" economies of Asia, notably Indonesia and Thailand, are racking up huge 5% annual increases in oil demand. But there are storm clouds ahead. The strong dollar could slow European demand as price increases work their way through the system. The roughly 15% increase in gasoline prices since last year could have a similar effect.

And OPEC, despite its periodic displays of unity, is inherently unstable. In Vienna, Saudi delegates quietly reassured colleagues that prices could remain in the \$18 to \$20 range if members stick together. But sticking together has never been one of OPEC's strong points.

By John Rossant in Vienna

TEAM WORK



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WHEN THE DUST SETTLES, IRAN MAY BE FACING WEST

The legacy left by the Ayatollah Khomeini, Iran's religious revolutionary, is an Islamic fundamentalist regime run by mullahs. But real power in Iran, following Khomeini's death on June 3, is likely to shift to leaders who are politicians more than spiritual guides. Speaker of Parliament Hashemi Rafsanjani, 55, one of the "pragmatists" who dealt secretly with the Reagan Administration in the arms-for-hostages affair, seems likely to emerge with the most clout. Eventually, Rafsanjani and his allies, including Ali Khamenei, 49, heir to the Ayatollah's religious role, are expected to turn to the West for trade and other links to rescue the regime from economic collapse.

In the months just ahead, however, rival bids for power by radicals such as Interior Minister Ali Akbar Mohtashemi and General Prosecutor Muhammad Moussavi Khomeini are likely to heat up the revolutionary rhetoric in Tehran. Khomeini advised the students who seized the U.S. embassy in Tehran, and Mohtashemi probably coordinated attacks against Americans in Lebanon in the early 1980s. In the political jousting, hostility toward the U.S. may become more strident than ever. "With Khomeini not there to keep the peace, radical factions will use anti-Americanism as a stick to beat the more moderate types," says Gary Sick, an Iran expert who served on the National Security Council staff. Not to be outflanked by such fanatics, Rafsanjani last month exhorted Palestinians to kill Westerners to avenge Israel's crackdown in the West Bank and Gaza.

ONLY CANDIDATE. Despite this outburst, Rafsanjani and his supporters are likely to play a more responsible role over time. As a leading parliamentarian, he's probably the most powerful figure in Iran now that Khomeini is gone, and he won his power in a relatively democratic election. As acting armed forces commander-in-chief he also has support in the military. He's the only announced candidate in the elections to be held

on Aug. 18 for Iran's presidency—an office that will become much stronger with the abolition of the post of Prime Minister. That shift in Iran's power structure is among the expected constitutional changes being drafted by a commission Khomeini established. The new rules are to be ratified in a referendum accompanying the Aug. 18 election.

Khamenei, like Rafsanjani, is a cleric of modest rank, but he holds the title of *hojatolislam*. Regardless of title, no successor of equal Khomeini's immense spiritual authority. But Khamenei, nearing the end of two terms as Iran's President, has ties to diverse groups in the regime. Like Rafsanjani, he favors a greater role for private enterprise in the economy as well as



SPIRITUAL SUCCESSOR ALI KHAMENEI

improved relations with the outside world. In the past year, France has actively revived trade and investment with Iran, but Khomeini's death and the attack against British author Salman Rushdie last February added new strains to relations with Britain and West Germany. Iran's pragmatists believe that the country needs to break out of its isolationist deal with deepening social and economic problems, from high inflation and unemployment to food shortages and a rampant black market.

There are few certainties, however, in Iran's volatile politics. Khamenei lost the use of his right arm in a terrorist bombing in 1981, and Rafsanjani was rumored to have been the target of two assassination attempts in the past year.

Until Iran's politics stabilize, prospects are dim for the release of nine Americans and six other Westerners held captive by Lebanese militants linked to fanatics in Tehran. For their captors, the hostages are bargaining chips, and they are unlikely to be traded away while the situation in Iran remains uncertain. But if Rafsanjani consolidates power, a deal for the hostages' release might be possible. If that happens, it will be a crucial step toward an opening to the West.

By Stanley Reed in New York, with bureau reports

GLOBAL WRAPUP

GREECE

Prim Minister Andreas Papandreu's personal conduct and alleged misconduct by his government are both issues in June 18 elections that are likely to end nearly eight years of socialist rule. Support for Papandreu's Panhellenic Socialist Movement has plummeted in polls, in part because of financial scandals that seem to implicate his government. Voters have also been put off by the highly publicized extramarital romance of Papandreu, 70, with an airline stewardess half his age.

The likely result will be the defeat of Papandreu's party by the conserva-

tive New Democracy Party, which advocates Thatcherite economic policies. But the New Democrats are likely to fall short of a parliamentary majority, forcing new elections next fall or spring. Despite the uncertainty, executives have been modernizing plants to keep pace with European integration. And Northern European conglomerates have bought at least a dozen of Greece's healthiest companies.

PERU

Mario Vargas Llosa, a novelist with a worldwide readership but no political experience, will be the candidate of a center-right coalition in next May's presidential election. The

three-party Democratic Front hopes the 53-year-old writer can fill the political vacuum left by fast-shrinking support for President Alan García and the left-of-center American Popular Revolutionary Action Party (APRA). His supporters suggest that APRA's candidate, former Finance Minister Luis Alva Caso, would capture only 12% of today's vote against 50% for Vargas Llosa.

Vargas Llosa advocates free-market policies and foreign investment. He has won support from voters battered by Peru's economic slide. But worsening social strains are also swelling the ranks of Shining Path, the once-rampant guerrillas who have stepped up urban attacks.

TEAM WORK



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GREYHOUND AIMS TO WIN BACK THE MIDDLE CLASS

GREYHOUND IS BRINGING TRAVELERS DOWN TO EARTH AGAIN

Thanks partly to rising air fares, traffic on the bus line jumped 20% in the first quarter

Greyhound Lines Inc. Chief Executive Fred G. Currey doesn't know Karla Stull, but he loves her. Stull, 19, took the first long-distance bus trip of her life after her jalopy broke down during a recent visit home to Dallas. Rather than get the car fixed, she paid \$10 for the 90-mile trip back to Waco, where she goes to college. Now, she thinks she'll keep on riding buses. Says Stull: "The bus is cheaper than a taxi."

That's music to Currey's ears. Since he bought Greyhound Lines in 1987 for \$375 million from former parent Greyhound Corp., Currey has struggled to persuade travelers that riding an inter-city bus can be a pleasant experience. He's aiming for a return to the days when Americans of every stripe traveled and working- and middle-class families visiting relatives or on vacation.

SIGNS OF LIFE. Those halcyon days ended with the arrival of cut-rate airlines. From 1960 to 1986, Greyhound's passenger traffic dropped 60%. Turnover fell 10 million seats, and the company's stock price fell 90%.

hound's woes, its package-delivery business was outstripped by the faster service offered by Federal Express Corp. and United Parcel Service Inc.

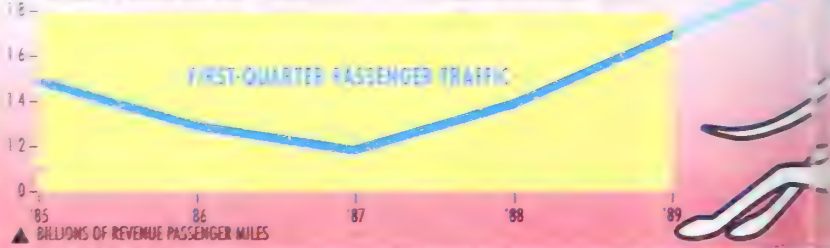
Now, however, Currey is noting signs of life in a business that was terminally ill. Last year, 22 million passengers chose to take Greyhound, up 10% from 1987, while sales increased 11%, to \$924 million. In the first quarter of this year, Greyhound passenger traffic jumped 20%. And Currey foresees more growth, though not at the hot pace of the first quarter. What's more, he's optimistic about the future, convinced that passengers are rediscovering an easy, inexpensive mode of travel.

Currey acknowledges that Greyhound's fortunes changed partly because of the recent surge in air fares. More help came from the Eastern Air Lines Inc. strike, which has made airplane seats scarce on East Coast routes.

But even without the benefit of rising air fares, Currey has been doing his best to revamp Greyhound and Trailways Inc., which he bought and merged with Greyhound in mid-1987. He installed a computer system, thus cutting the waiting time for tickets. Another system, similar to the software developed by airlines, lets Greyhound offer discount fares more selectively.

Perhaps the toughest job facing Currey

GREYHOUND LINES: A COMEBACK TRIP



is to change Greyhound's down-at-heel image. The company's terminals were in decaying urban centers hit by crime. "Many people," says Teets, "believe that only the unem-ployed ride the bus." Some middle-class people wouldn't even consider buses as a mode of transport.

NEW ROAD. Currey spent \$30 million hauling Greyhound's old terminals and opening new ones. He increased the company's advertising budget 50%, to \$10 million, to tell riders about the new Greyhound. In Detroit, Chicago, and San Francisco, Greyhound has captured new riders by building terminals closer to city centers, thus making it more convenient for rail passengers to hop a bus rather than rent a car. Other efforts include a modest revival of Greyhound's express service. For those routes, the company is using fuel-efficient vans. Currey is also trying out a same-day package delivery service.

Currey is still only part way down the road to profitability. For one thing, Greyhound has to shed its reliance on higher air fares that now turn travelers' way. Warning signs are already beginning to appear: Some newly dis-carded air fares are cropping up on the West Coast.

Even if that weren't enough, Greyhound faces tough labor negotiations. In 1987, Currey obtained over \$25 million in concessions from Greyhound's me-mbers and drivers. Now, many want more. "I don't care if we throw them into bankruptcy," says Richard Simpson, chief financial officer with the Amalgamated Transpor-tion Union. "Maybe we will get somebody who can afford to pay us."

Greyhound's financial position is still shaky. It owes \$350 million from its LBO and \$80 million it spent buying Trailways. To meet interest payments last year, the company had to sell its bus fleet and lease it back again.

In spite of that sacrifice, the company managed to turn a profit of \$17 million in 1988. But operating expenses rose to \$40 million from an \$8 million loss. Now, if Fred Currey can keep his debt to manageable levels and keep luring travelers to Greyhound, he may save one of the oldest and best-known names on the American road.

By Kevin Kelly in Dallas



DATA: GREYHOUND LINES INC.

THE OTHER GREYHOUND ISN'T WINNING ANY RACES

John W. Teets just couldn't contain himself. On a recent trip to Chicago, the chairman of Greyhound Corp. disclosed to reporters plans to introduce a low-calorie line of the company's successful Lunch Bucket microwaveable meals. Never mind that he angered his marketing staff, which considered the project top secret. It was good news, Teets reasoned, and his Phoenix-based conglomerate needed some of that.

For Teets, good news has been scarce lately. Since 1987, when he sold off Greyhound's venerable bus line for \$375 million in cash and stock, Teets has been struggling to make sense of his new company. While the bus line has been perking up, he continues to wait for rewards from an expensive 1987 foray into airline food service. First-quarter profits from existing operations rose 16%, to \$14.8 million this year. But Greyhound's 1988 profit of \$104 million on \$3.3 billion in sales was a baby step from the \$103 million earned in 1982, when Teets took over.

Teets, 55, inherited an unwieldy hodgepodge, with products as diverse as Dial soap, Armour Star meats, and mortgage insurance. His goal: bringing the return on equity up to 15%. Out went a computer-leasing business, a knitting-supply unit, and the meat-packing plant. Unable to reach an accord on wage cuts with Greyhound's unions, Teets sold off the sluggish bus line. But Greyhound's mortgage-insurance and asset-based financing units were trouble. Teets tried to sell the finance company, which lost \$7 million in 1985 on equipment leases, but couldn't find a buyer. And when he tried to unload the money-losing mortgage insurer's assets in the form of a \$125 million junk-bond offering, buyers balked again. He ended up writing off the insurance business for \$45 million and has refocused the now profitable finance unit on real estate lending.

TAKEOVER TARGET? With anemic net margins of 3% and return on equity still hovering around 10%, Teets has a long way to go. Indeed, Greyhound has lately been the butt of persistent takeover speculation. His challenge is to squeeze more profits out of what remains, and he's making some headway. Greyhound has introduced a new liquid version of Dial soap, and the Lunch Bucket low-calorie line should be out by 1990. Earlier this year, the company added a third ocean liner to its Premier

Cruise Lines, and the transit-bus manufacturing unit Teets bought from General Motors Corp. in 1987 is showing slow progress. Further, Greyhound expanded its profitable Travelers Express money-order business by buying a Dallas-based rival.

Teets needs a boost, though, from his biggest acquisition, the Dobbs International Services Inc. unit he bought from Carson Pirie Scott Co. for \$390 million in 1987. Dobbs provides meals to airlines and runs concession

GREYHOUND'S ECLECTIC MIX

Division	1988 results: Revenues	Operating income
Product or business	Millions of dollars	
CONSUMER PRODUCTS	\$962	\$73
DIAL SOAP, PUXE DETERGENT		
SERVICES	1,652	131
TRAVELERS EXPRESS MONEY ORDERS, AIRLINE MEALS, CRUISE LINES		
BUS MANUFACTURING	440	44
FINANCIAL	251	25*
REAL ESTATE FINANCING		
TOTAL	\$3,305	\$273

*Before onetime charge

DATA: COMPANY REPORTS

stands at terminals. The price was steep, analysts say, and though the \$528 million operation had \$32 million in operating profits last year, interest charges soaked it all up.

Teets, a weight lifter with unbounded enthusiasm, isn't giving up on his 15% ROE goal. "It's going to take another two years to get there," he says. Last year, he cut Greyhound's debt by \$257 million, to 42% of capitalization, by shedding several more small units and selling about \$50 million in receivables. But to pare debt further and ease the interest burden, he will have to rely on future cash flow, which should rise only 4% this year.

As Teets wrestles with his own Greyhound, he insists he has no regrets about the bus line he sold off. He still owns 22.5% of it and can share in the upside. But while Teets is happy to leave the driving to the new managers of Greyhound Lines Inc., it's going to take some more tinkering under the hood of his own company to prove that his overhaul made sense.

By Eric Schine in Phoenix

L.A. GEAR IS GOING WHERE THE BOYS ARE

Will their splashy shoes sell in the cutthroat men's market?

Robert Y. Greenberg could always spot a trend. He sold wigs in the '60s, roller skates in the '70s, and even turned a quick profit with E. T. shoe-laces in 1982. Since 1985, Greenberg's L. A. Gear Inc. has ridden the fashion-sneaker craze to incredible heights. Jumping from aerobic shoes to brightly colored high-tops for teenage girls, Greenberg saw sales shoot from \$11 million in 1985 to \$224 million last year.

So what's Greenberg latching on to now? Basketball and running shoes for men. He is trying to elbow his way into one of the shoe industry's most established and cutthroat arenas—that 60% chunk of the \$4.2 billion U. S. athletic-shoe market that has largely eluded him. Greenberg boasts that L. A. Gear will storm the men's market like “an 800-pound gorilla,” reach the billion-dollar mark by next year, and then leave Reebok International Ltd. and Nike Inc. in the dust.

IDENTITY CRISIS. The 48-year-old chief executive may have a tough time delivering. After all, ever since Nike's high-tech, air-cushioned shoes took off two years ago, nearly every athletic shoe-maker has come up with its own performance entry. It's also unclear just how long the market's hot streak can last. Positioning L. A. Gear as a serious athletic shoe risks blurring the brand's identity as a splashy, youthful trendsetter for women—“cannibalizing its cachet,” warns Stephen Encarnacao, senior vice-president at Converse Inc.

But L. A. Gear has surprised doubters before. Since 1986, in fact, the company has jumped from 15th place among sneaker-sellers to third, recently passing veteran player Converse (table). Its stock, meanwhile, has soared to nearly \$60 a share from \$5.75 at its initial offering in July, 1986.

To accomplish that magic, L. A. Gear focused on selling spangled sneakers in ice cream colors to the 80% of buyers who rarely set foot on a tennis or basketball court. They sold sex and sizzle, from ads of

scantly clad blondes to trade shows where tanned teens jiggled to a disco beat.

But will real men buy shoes with a Valley Girl image? Fat chance, says Philip O. Sancken, an analyst for Piper, Jaffray & Hopwood Inc. in Seattle, and more important, a jogger. “I enjoy looking at their ads,” he says, “but I'm not going to spend \$60 or \$70 for their shoes.” Men typically

arents as springy urethane footbeds, but industry types are skeptical. “The industry would be very shocked if a few years from now, L. A. Gear was the technical leader,” says Alex J. Vergara, ad director at retailer Athletic Attic Marketing Inc. In Greenberg says he spends just a fraction of what his rivals do on research. But he needs research when hype will suffice?

'GERIATRIC CROWD.' Never shy about making glowing predictions, Greenberg says that sales of L. A. Gear's men's shoes will jump from the \$20 million worth he sold last year to as much as \$400 million next year. His advertising machine is in full gear, though the strategy is curious. Rather than signing some slam-dunk star as spokesman, L. A. Gear enlisted 42-year-old L. A. Laker basketball star Kareem Abdul-Jabbar. Choosing Jabbar, winding up his final season, was a move guaranteed to appeal to the “geriatric crowd,” one analyst guesses.

L. A. Gear's promotional blitz extends to Wall Street as well. The company buttressed its bottom line in the first quarter by dropping \$3.9 million in ad expense until the traditionally high back-to-school sales period. The company argues that it's men booking the ad expense close to the sales they'll generate, and besides, the practice complies with accounting standards.

The result: First-quarter earnings rose from the year-earlier 21¢ a share to 62¢ a share—more than the 35¢ it would have earned with the charge. *Barron's* recently chided L. A. Gear for managing its earnings this way, the company chided out some rosy new earnings predictions. And the day after *BUSINESS WEEK* reporter interviewed company executive, a company official suggested a wire service that upward movement in the stock might have been caused by an anticipated favorable story. The stock rose the day up 3½ points.

Greenberg, who owns 25% of the stock, is also plunging into the jeans and watch market where L. A. Gear's brand and distribution network will be a big help. But in the end, the company's fortune will ride on whether its fickle teenage customers tire of its purple, red, or gold shoes. And Kareem may fail to lure enough men to lace up shoes made famous by aerobic dancers. Don't tell that to Robert Greenberg, though. L. A. Gear, he insists, won't go the way of E. T. shoe-laces.

By Kathleen Kerwin in Los Angeles



THE HIGH STEPPERS IN ATHLETIC FOOTWEAR

Company	Market share*	Gross sales Millions	Company	Market share*	Gross sales Millions
REEBOK	27.1%	\$1,150	AVIA	4.2%	\$180
NIKE	22.7	964	ADIDAS	4.0	170
CONVERSE	5.9	250	KEDS	3.5	150
L.A. GEAR	4.7	200	OTHER	27.9	1,363

*Percentage of 1988 U.S. wholesale sales

DATA: SPORTING GOODS MANAGEMENT NEWS INC.

pay less attention to style. They look instead at sole cushions and how well the inner structure supports the foot. “Technology has been the fashion,” says Bruce W. MacGregor, marketing chief at Avia Group International Inc., a Reebok subsidiary.

Greenberg shrugs off criticism. “Now we're the leading edge of fashion and the leading edge of technology,” he crows. L. A. Gear promotes such high-tech compo-

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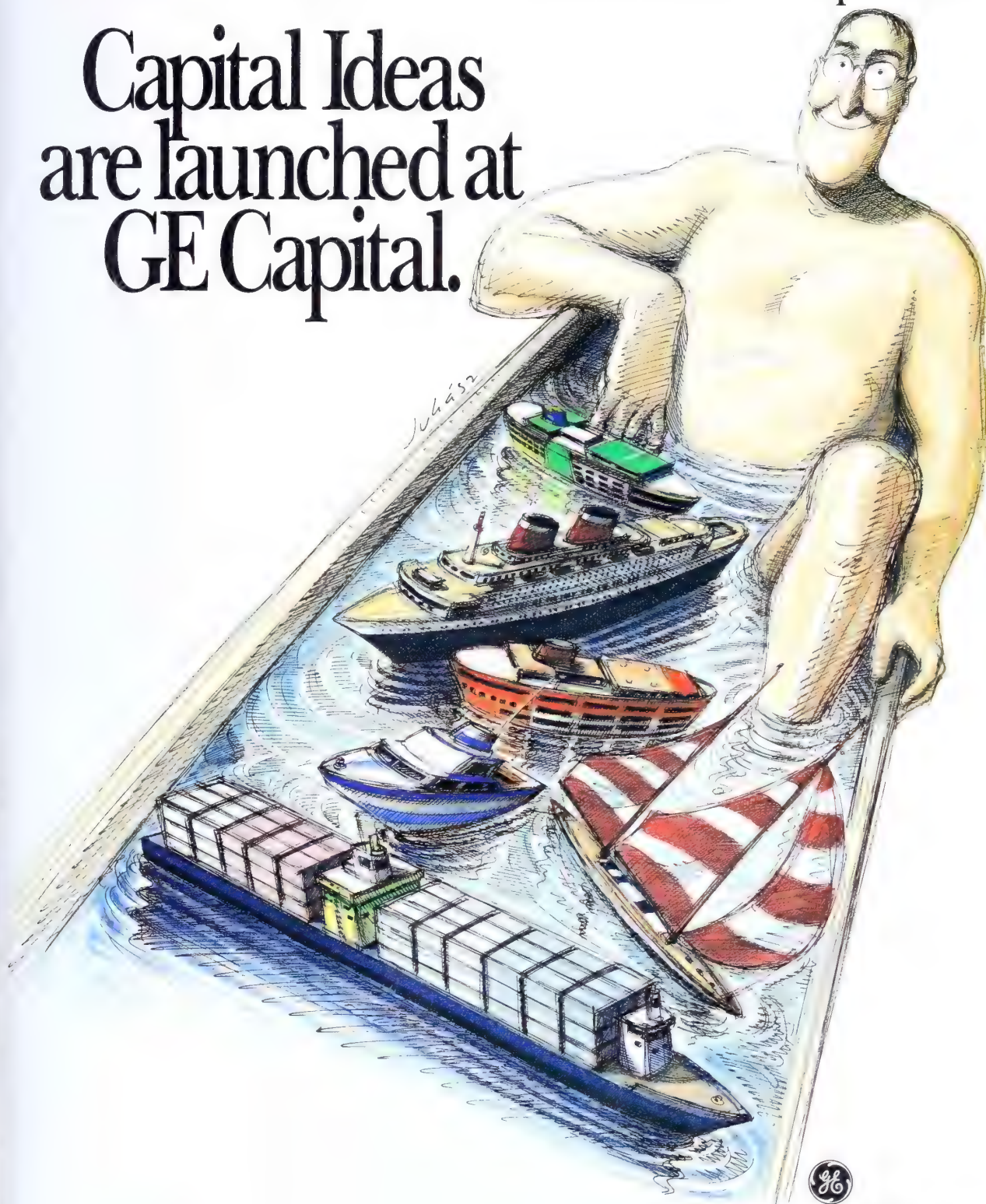
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SUDDENLY, RYDER'S ENGINE IS SPUTTERING

But Tony Burns is determined not to veer from his course

For years, M. Anthony Burns produced the type of results Wall Street loves. As chairman of Ryder System Inc., a transportation-services conglomerate based in Miami, Burns built a powerhouse through acquisitions and aggressive marketing. Since 1979, Ryder's revenues have grown fivefold, and profits have increased an average of 14% a year. With such an admirable record, Burns, an earnestly optimistic Ne-vadan, earned a reputation as a can-do manager. It's no wonder that investors believed his confident prediction two years ago that Ryder's profits could keep growing at their heady pace.

On May 23, though, Tony Burns reversed field. He told his managers that Ryder's 1989 profits, far from setting a new record, would probably drop. The stock, which had drifted steadily downward to 25 from a 1987 high of 43, dropped an additional 7% after the news.

What's wrong at Ryder? The company's bread-and-butter business, renting yellow trucks to consumers and companies, is slowing down. More important, there's no way that Ryder, with more than \$5 billion in sales, can grow as fast as it did when it was a much smaller corporation. Now, as it evolves from a hot growth company into a mature enterprise sensitive to the economy, Ryder runs the risk of falling prey to a raider. The breakup value of Ryder could be as much as \$45 a share, and many investors, at least for now, are disappointed with the company. "We have certainly expressed our dismay at the stalling of earnings," says Stephen P. Dexter, an investment analyst at Kemper Financial Services Inc., which has sold most of its 565,000 shares. "Ryder's aggressive expansion has not worked."

'PRESSURE.' Burns has heard the complaints. "We have been under tremendous pressure to take short-term actions," he concedes. Selling off big pieces of Ryder would undermine Burns's long-term strategy of dominating

such service businesses as truck leasing, aircraft maintenance, and school-bus operations. To build up market shares, Burns from 1984 to 1987 tripled Ryder's assets, to \$6 billion, through more than 100 acquisitions, including a repair business for jet engines and numerous school-bus operators.

Yet, starting last year, the softening economy cooperated less and less with Burns's ambitious plans. Commercial customers anticipated an economic slowdown by leasing fewer trucks. Another Ryder business, hauling newly built cars from factories, suffered from the glut in the auto market. By mid-1988, Ryder's profits turned flat and finished the year up 5%, to \$197 million—far below analysts' expectations.

For months, Burns hoped that the problems were temporary. But the slump in earnings persisted, and it became increasingly clear that Ryder, which has piled up \$2.4 billion in long-term debt, had also inherited too many management and numerous operating inefficiencies from its acquisitions.

NO 'MEAT AX.' Burns had also failed to foresee the resurgence of a big competitor, U-Haul International Inc. A rapid fleet expansion enabled Ryder last year to overtake U-Haul as the leader in consumer truck rentals, while its rival was trying to revamp its faded image and support a heavy load of debt. U-Haul

management was also distracted by a feud that had divided the Shattuck family, the company's controlling shareholders. Still, U-Haul managed to flood the market with 10,000 new trucks to sport such features as a special stowaway compartment for computers and stereos. U-Haul also cut into Ryder's profits by offering steep

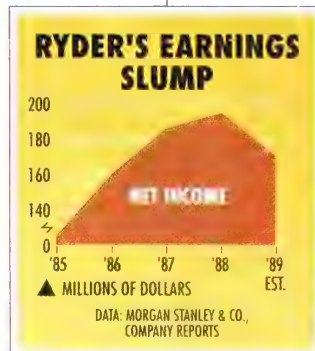
discounts in many markets.

Even as Burns vows to slug it out with U-Haul, he's prudently trimming his truck fleet by several thousand vehicles. He's also selling off such ill-fitting acquisitions as a small insurance operation and its money-losing freight hauling business.

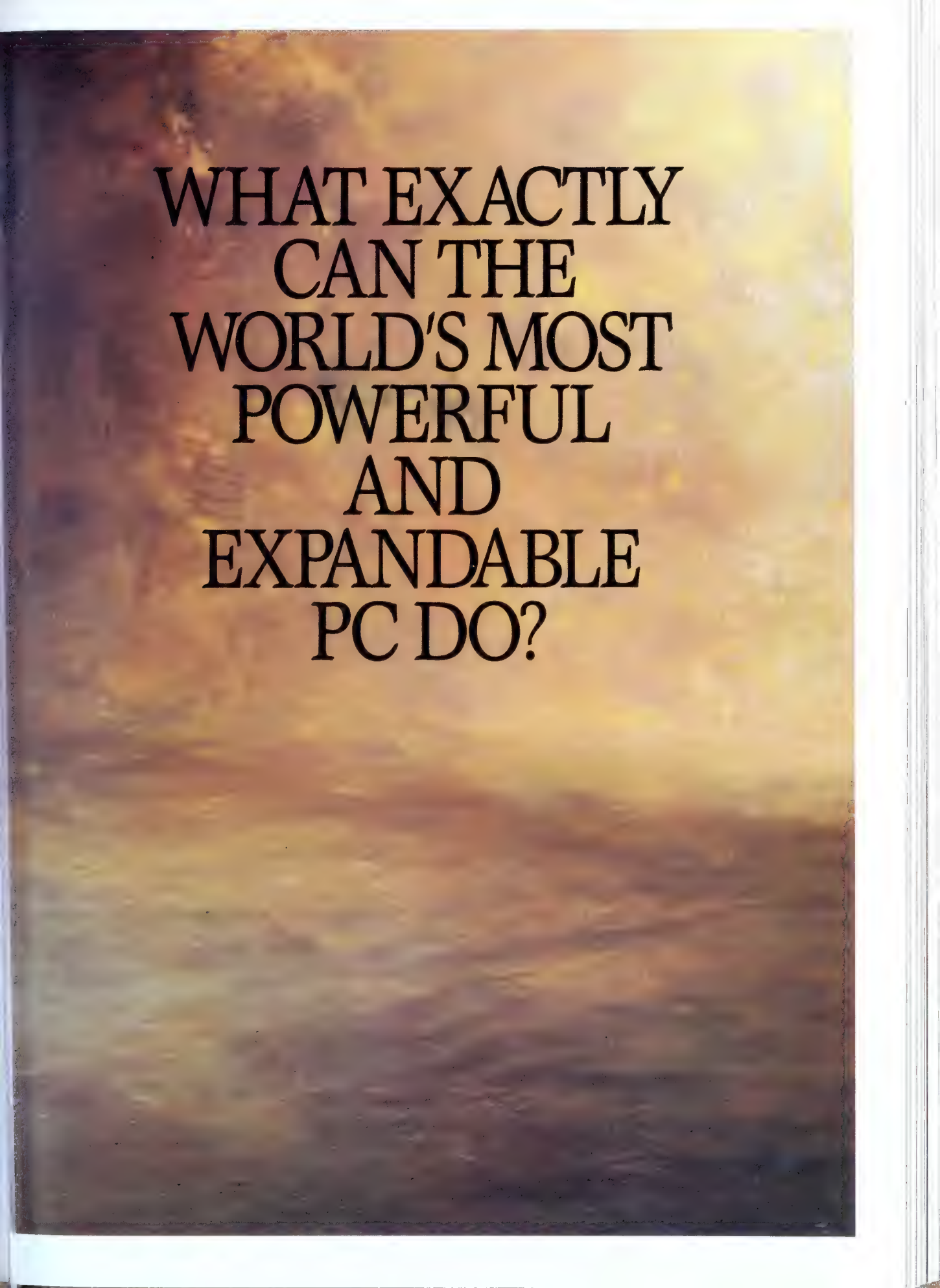
But don't expect a major dismantling of Ryder, not as long as Burns is in charge. "I'm not going to take a meat ax to this company," he says. Burns so intends to keep a promise he made two years ago—that Ryder would stop making big acquisitions for a while and instead grow from within. But that's more easily promised than done. "Unfortunately, they're making this shift when the economy is softening," says analyst George V. Robertson at Alex. Brown & Sons Inc.

While he sorts out Ryder's problems, Burns plans to reward shareholders for their patience with a big stock buyback. But investors can turn impatient fast. Although many are holding onto their stock because they think Burns will deliver his promised turnaround, others are betting on either a raid or leveraged buyout. It will be a tough year for Tony Burns.

By Pete Engardio in Miami, and Eric Schine in Los Angeles



TRUCK RENTALS, RYDER'S MAINSTAY, ARE SOFT



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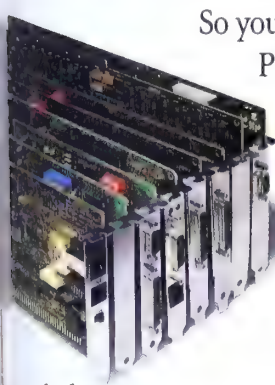
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THE MINING INDUSTRY LIMBS OUT OF THE PITS

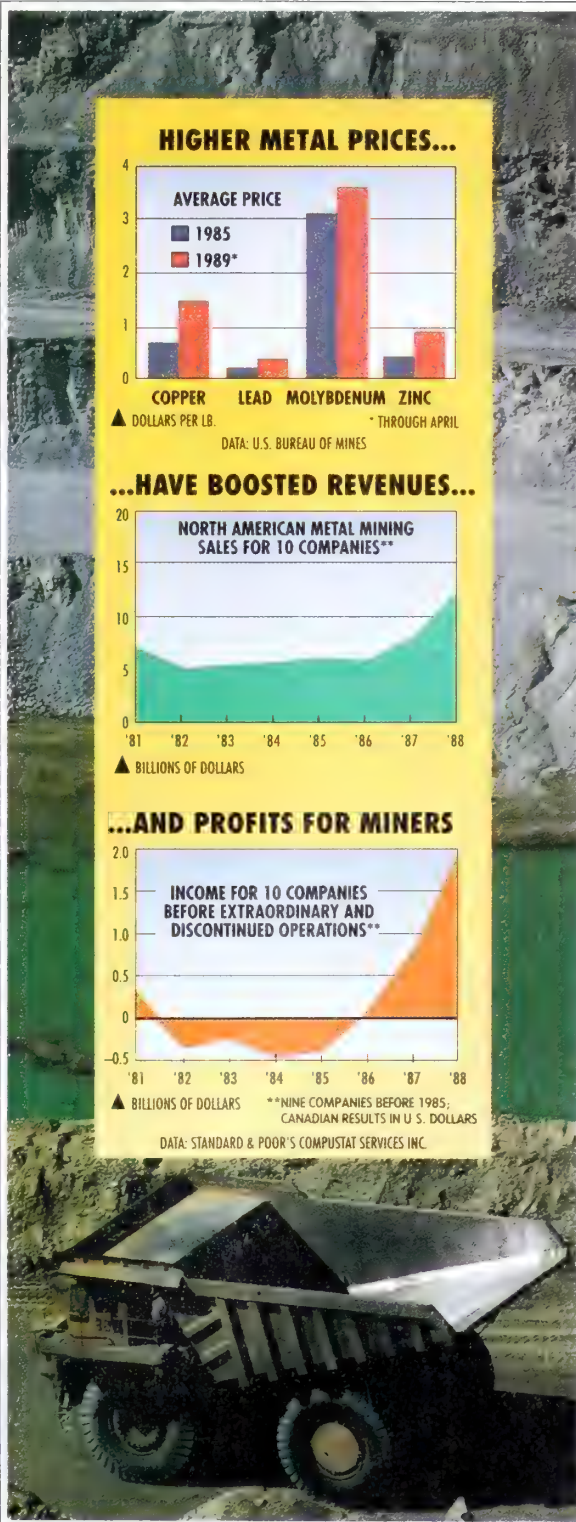
Companies have cut costs to the bone—and have juicy returns to show for it

Milton H. Ward, president of Freeport-McMoRan Inc., recently was at Chez il, a restaurant in Chicago, when he struck up a conversation with people at the next table. "What do you do?" a woman asked. Ward said he ran a natural resources and metals mining company. "Oh," she replied, "do they do that here?"

A few years ago, Ward might have been upset. But not now. With "great enthusiasm," he says, and his companions—Harry M. Ger, chairman of Homestake Mining Co., and John A. Knebel, president of the American Mining Congress—described the sterling outlook for the North American mining industry. "She got a hell of a lot more than she wanted," says Ward, laughing.

Like Ward, mining executives are ebullient these days. In 1984, the metals mining industry was on its knees, a victim of high costs, low prices, and weak management. Now "that old industry is back," says George S. Ansell, president of the Colorado School of Mines. It has been replaced by a leaner, more aggressive industry. "Talk about a rebirth," says Keith J. Barr, president of Cyprus Minerals Co., a copper and molybdenum producer.

MINING ALIVE. The numbers show a startling change has taken place. Since 1981, North American metals miners have cut employment in half, helping boost productivity for some as much as sixfold. A strong economy and weak dollar pushed up prices for most metals, and producers have been able to pay off their debt and post big profits—up an average 73% in the year's first quarter. That figure masks some huge increases: at Cyprus Minerals, 220% at Inland Cliffs Inc., the nation's largest iron-ore producer, and at Inco Ltd., the free world's largest nickel producer.



Even Phelps Dodge Corp., which lost \$406 million from 1982 to 1984 and seemed headed for Chapter 11, reported a 79% profit gain, to a record \$166 million, in the first quarter. Its revenues were up 22%, to \$693 million. Five years ago, when Phelps Dodge directors were warned they faced low copper prices for three more years, "you'd have thought somebody died in the boardroom. We didn't have three years of staying power," recalls Douglas C. Yearley, named chairman in May. Since 1984, PD's stock has jumped from 13 to 57. In May, it raised its dividend by 25%, to 75¢ a share.

The momentum in revenues and profits obviously has to slow. And a recession in the U.S. or Europe would hurt. Still, analysts are optimistic. Metal inventories are low: At 25,376 tons, for instance, there's now 94% less copper in Commodity Exchange warehouses than in 1984. Demand is growing at 2% a year. And little new capacity is coming on stream. "You're not going to see a lot of corpses" even in a major recession, says Ansell. Metals miners have cut costs so radically that even in a sharp downturn "they'll earn close to what they did in their last price peak a decade ago," agrees Peter L. Anker, managing director at First Boston Corp.

SLEEPER. Seemingly assured of near-term health, metals companies now are planning for the future. For instance, Amax Inc., which in the mid-1980s lost its claim as the No. 1 molybdenum producer to Cyprus, has turned to gold, now its fastest-growing product. Since 1985, Amax has amassed nearly 3 million ounces of reserves in the U.S., including the Sleeper mine in Nevada, at \$103 an ounce the lowest-cost gold producer in the country. In April, Amax opened the Wind Mountain mine north of Reno.

Others are "exploring with a

Industries

checkbook instead of a pick," says Richard de J. Osborne, chairman of Asarco Inc., which mines copper, lead, and zinc. In 1986, Cleveland-Cliffs raised its iron ore reserves 266% by buying Pickands Mather & Co. from Moore McCormack Resources Inc. And Cyprus, which last July purchased Inspiration Resources Corp.'s Miami (Ariz.) copper facilities, is trying to diversify by acquiring Reserve Mining Co.'s iron ore properties.

At Asarco, vertical integration is the strategy. For 100 years, the New York-based company mainly smelted and refined lead and copper from ore mined by others. Then in the mid-1980s, when its suppliers closed mines, Asarco ran short of feedstock and lost \$442 million in four years. Now, Asarco is determined to avoid a replay. In April, for about \$100 million, it bought 49.9% of Montana Resources Inc., which owns Anaconda Co.'s former Butte (Mont.) copper properties. As a result, Asarco now mines 67% of the copper ore it processes and 55% of the lead, up from 25% and 5% four years ago. By 1992, Osborne wants Asarco to produce 100% of the copper ore it uses.

Missoula (Mont.) contractor Dennis R. Washington, who bought the Anaconda properties for about \$6 million and still



CYPRUS MINERALS' BARR: FIRST-QUARTER PROFITS ROSE A STAGGERING 305%

retains 50.1% ownership, turned them around by cutting costs. For instance, Washington pays nonunion workers \$13 an hour vs. the \$22 Anaconda paid union workers, though he has added profit sharing that provides big bonuses. As a result, Montana Resources produces copper for 55¢ a pound vs. Anaconda's \$1.

Phelps Dodge, North America's largest copper producer, has cut costs with technology. By substituting chemical extraction for conventional processing it has reduced expenses to 55¢ a pound, from 85¢ in 1984, and reductions will continue. The company wants to use chemical extraction for 40% of its copper processing by 1992 vs. 25% now.

Despite its gains, mining still faces challenges. One is to find new technologies to reduce costs further. But many companies haven't raised research budgets that were gutted in the mid-1980s. "It's a difficulty we'll have to rectify," says Cyprus' Barr.

WAGE GAINS. Keeping a lid on labor costs is also essential. After taking pay cuts three or four years ago, workers are demanding raises. Some 90% of Cyprus' employees got profit-sharing bonuses last year—plus 4% pay increases. Management at unionized operations is being confronted with demands of significantly higher pay as contracts expire on June 30. About 50% of U.S. workers in nonferrous metals still are unionized, most of them members of the United Steelworkers. The USW wants wages restored to 1986 levels. And observers think it may succeed.

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Even so, the coming wage increases ready have been offset several times over by big productivity increases. U.S. metals mining employment had plunged 41,100 in 1986 from 103,700 in 1981. Today, though production is back at 1981 levels, employment is still just 49,500, thanks to labor-saving capital expenditures and better deployment of work forces. Thus the wage gains being considered would amount to "realistic settlements," says George D. Rainelle, a senior research analyst at Charles River Associates in Boston.

BLING ON DEBT. In fact, corporate raiders, not unions, may be the biggest worry for mining companies. Some 18 months ago, Cleveland-Cliffs had to rally stockholders against David F. Bolger, a raider who wanted to oust its board. So in 1987, Newmont Mining Corp. had to ask its major shareholder—Consolidated Gold Fields PLC, the British natural-resources company—to increase its holdings to 49% of Newmont to prevent takeover by T. Boone Pickens Jr. Then Gold Fields was attacked by Luxembourg-based Minerals & Resources Corp., which owns 29.6% of Gold Fields stock. That takeover stalled when a U.S. District Court in New York granted Newmont an injunction on the grounds that Minarco, owned by Anglo-American



PHELPS DODGE'S YEARLY: NOW PRODUCING COPPER AT 55¢ A POUND VS. 85¢ IN 1984

Corp., the world's largest gold producer, would violate U.S. antitrust law by acquiring Gold Fields.

Meanwhile, Phelps Dodge may have a battle with Harold C. Simmons, who in April notified the Federal Trade Commission of his intent to buy PD stock. And Inco seems on the defensive. In

January, to raise its debt-to-capitalization ratio to 59% and discourage raiders, it borrowed \$500 million to help pay a special \$1 billion stockholder dividend. Now, it's considering a second special dividend—a move some think is excessive. "You can bulldoze a cheese company and sell its land," says Daniel A. Roling, a mining analyst at ML Capital Markets. But this doesn't work with a remote copper mine. What's more, taking on too much debt can be a dangerous gamble. "If copper falls to 60¢ a pound and a raider has used junk bonds to take us over, he would be in a lot of trouble," says Barr.

While the takeover artists ponder that, the industry is staying healthy in part by not doing what it always did in past booms. When prices rose, expensive new mines were opened and costs got out of hand. "We were fat, dumb, and happy," recalls Barr. That's an era that everyone swears is gone. "We won't allow bad habits to creep in again," says Newmont Mining's chairman, Gordon R. Parker. Keeping costs low has become an article of faith for the industry, he says, and "we've all caught religion."

By Sandra D. Atchison in Denver, with Chuck Hawkins in Toronto, Michael Schroeder in Pittsburgh, and Resa W. King in Connecticut

JOHN S. ARGENTI



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Legal Affairs

ANTITRUST LAW

RILL: A VETERAN
WASHINGTON LAWYER



PUTTING THE 'ANTI' BACK IN THE ANTITRUST DIV.

Appointee James Rill is likely to be a pro-enforcement chief

If they ever encountered a merger they didn't like, the free-market academics who dominated antitrust policy during the Reagan Administration didn't let on. The Reaganites believed that the government should interfere with business decisions only rarely and confined their intrusions to attacks on criminal bid-rigging and price-fixing. Business, of course, loved its eight-year fling with laissez-faire.

Now, James F. Rill is about to change all that. As President Bush's choice to head the Justice Dept.'s Antitrust Div., the veteran Washington lawyer will bring a pro-enforcement view to the job. The 56-year-old Harvard law school grad, who has spent his 30-year career with the same D.C. law firm, Collier, Shannon, Rill & Scott, declined to discuss his plans before his June 15 Senate confirmation hearing. But associates say he is likely to bring more civil cases in an effort to block mergers and to enforce other neglected antitrust laws. Among Rill's expected targets: transportation, the Baby Bells, and insurance.

"Changes will occur just about everywhere," predicts Charles F. Rule, who recently left as antitrust chief and backed Rill's nomination.

MARCH ON SHERMAN. No one expects a return to the antitrust enforcement of the 1970s, when trustbusters stretched the law to its boundaries by trying to block conglomerate mergers. Rather, Rill's colleagues say he agrees with the Reagan Administration view that the evolution of global markets makes concentration at home less threatening. Indeed, Rill's first assignment from Attorney General Dick Thornburgh will be to modernize the 99-year-old Sherman Antitrust Act to reflect this change. The likely result: legislation letting companies do joint manufacturing and marketing of such products as high-definition television and semiconductor chips. So far, proposals already are moving through Congress.

Rill's willingness to support such loosening, despite a generally hard-line stance, demonstrates his pragmatism. The Illinois native does not share the

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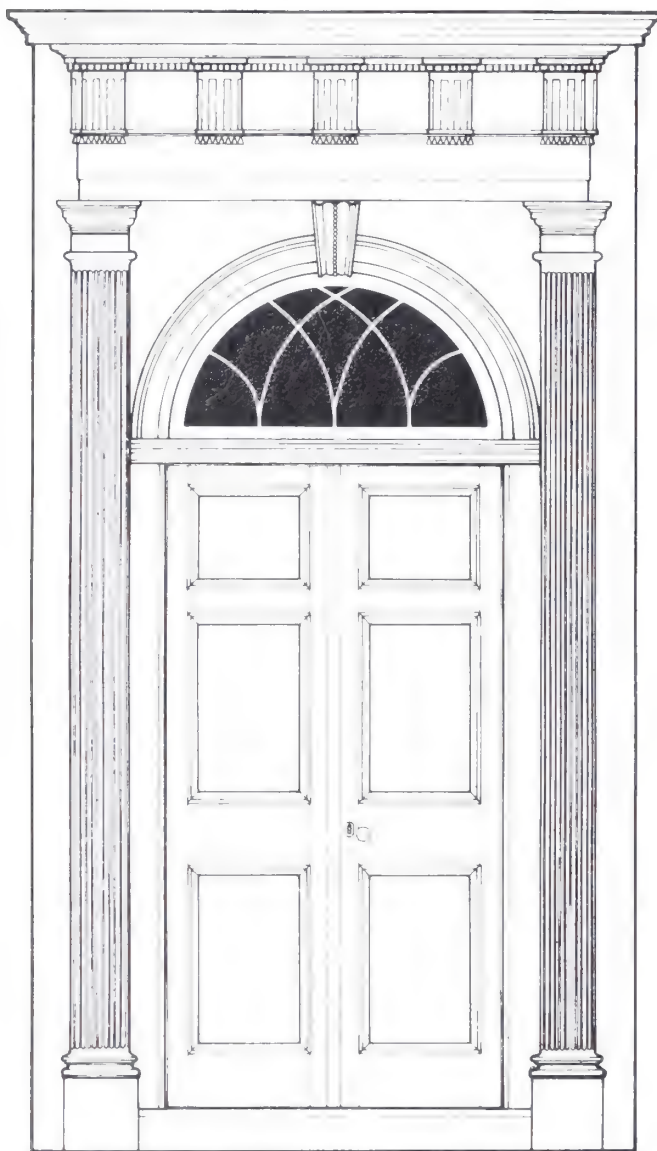
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Legal Affairs

Chicago School's almost messianic devotion to free-market theories. Indeed, the only strain of fanaticism in his well-tempered life seems to involve Civil War history and sports. A former Dartmouth College football lineman, he is now a devotee of scuba diving, friends say. He recently cajoled nearly the entire management team of the American Bar Assn.'s antitrust section into a scuba diving expedition. Colleagues say they can tell which phase of the Civil War he is studying by the obscure metaphors he draws during legal strategy sessions.

Rill is expected to bring high standards to the division at a time when ethics is a volatile issue in Washington. In the 1970s, as part of a legal team defending supermarket chains against price-fixing charges brought by beef producers, some defense lawyers argued that the other side's request for evidence didn't include some potentially damaging documents. Rill insisted that everything be turned over. "A lot of people would have taken the easy way out," says Richard W. Odgers, who then represented Safeway Stores Inc. and is now Pacific Telesis Group's general counsel.

This tendency to play by the book may be the key change Rill brings to the job. Experts say that if the antitrust calls close, Rill's instinct will be to block a deal. "It will be a little more difficult to get mergers through with Rill interpreting the guidelines," says Robert H. Tofsky, an antitrust specialist and dean of Georgetown University's law school. Rill also may go after companies that cut prices to drive out rivals or manufacturers that pressure distributors to keep prices high. Under Reagan, no case was brought in either area.

RESERVATIONS. Rill's first big test could come in the transportation industry. This year, Justice inherited the Transportation Dept.'s authority to review mergers in the airline industry. Now under study is a proposed merger of the computerized reservation systems of Delta Airlines Inc. and American Airlines Inc. The combination would create a single system controlling 44% of the market, making it the largest in the industry. The single system would also provide a competitive edge when travel agencies book customers, since it would be American and Delta flights first. Already, state attorneys general, who took over as the antitrust police in the Reagan era and with whom Rill hopes to repair relations, have urged Justice to oppose the merger.

In the criminal area, Rill is expected to keep the heat on industries that engage in bid-rigging or price-fixing. And he may branch out beyond the small government-contractor cases favored under



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Legal Affairs

Reagan by taking action against large nationally known entities. He also may bring criminal contempt charges against one or more of the Baby Bells for fully violating the consent decree that governs the breakup of American Telephone & Telegraph Co. The court order bars the Bells from entering the manufacturing, information services, and long-distance businesses. A Justice Department source says that a grand jury probe of a gun under Rill's predecessor is almost completed and that charges are likely against more than one company. Nynex Corp. acknowledges an investigation over its purchase of Telco Research in Nashville, which makes software for

Rill may bring criminal contempt charges against one or more of the Baby Bells for violating the consent decree.

managing telecommunications networks. Nynex says it didn't violate the decree.

Rill may also try to push through a radical change in the federal government's relations with the insurance industry. Since 1945, the industry has enjoyed an exemption from federal antitrust law. But as former head of ABA's antitrust section, Rill helped persuade the House of Delegates in February to vote for repeal of the exemption. He feels such exemptions are dangerous in any industry.

RARE BLEND. A similar push with lawmakers could set off a bloody battle in Capitol Hill, where the industry is a campaign contributor. But Rill will have support from Democrats who oppose the Antitrust Div. That could help ease relations between the division and Congress, which were badly strained under Reagan. In fact, last year, the Federal Judiciary Committee asked the General Accounting Office to study whether economists at Justice, not lawyers, were making law-enforcement decisions on whether the division had ignored its merger guidelines.

Rill's appointment is likely to dispel such concerns. He'll bring to the blend of views rare in the past 20 years: a healthy respect for antitrust laws tempered with the realization that U.S. industry needs enough flexibility to compete more competitively overseas. His policies will fall somewhere between 1970s pragmatism and the laxity of the '80s. After two decades of extremism, that may be a relief.

By Paula Dwyer in Washington



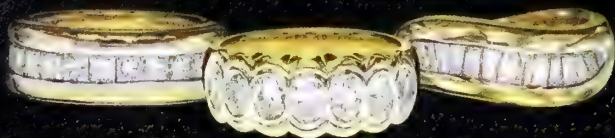
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MORE COMPANIES ARE CHUCKING THEIR COMPUTERS

An old strategy, time-sharing, is back with a new wrinkle

In 1986, Foodmaker Inc. faced a cash crisis. Its parent company, Ralston Purina Co., was purchased by British Petroleum Co. And Foodmaker, which runs the Jack in the Box and Chi-Chi's fast-food chains, went private in a \$175 million leveraged buyout. Soon, its long-term debt surged past \$300 million, and it found itself too pressed even to buy computers for bookkeeping and financial analysis, which had been done at Ralston's corporate data center in St. Louis.

So Foodmaker junked the idea of buying computers. Instead, it signed on Litton Computer Services to do its data processing. That avoided the expenditure of \$2 million on a computer center. "And we're paying 17% less for data processing than we did the last full year with Ralston," says Terry Babbitt, Foodmaker's vice-president of information services. "We've cut \$180,000 in salaries alone for the six staffers we let go."

ENTICING SHIFT. Foodmaker is in the vanguard of a rapidly growing trend. Outsourcing, or using external computing centers to handle internal data, is becoming a favorite strategy for companies in transition—those involved in LBOs, mergers, acquisitions, or just needing to cut costs. Customers realize big savings from outsourcing because it lets them reduce overhead, forgo expensive equipment maintenance, and avoid buying bigger computers each time data processing demands grow. With outsourcing, customers pay only for the share of the computer they use, and if they need more space on the machine, they just ask for it. That, says Norman Weizer, a senior consultant at Arthur D. Little Inc., "allows a company to use limited resources to build more capital instead of sinking these resources into computers."

It also lets veteran computer-service bureaus such as Litton and McDonnell Douglas Information Systems Co. make money from an old concept. These companies were leading providers of time-sharing in the



BABBITT:
SLASHING
COSTS

OPTING FOR OUTSOURCING

FOODMAKER

Instead of building a data center from scratch after a leveraged buyout in 1986, the fast-food company farmed out its computing. The company's data processing costs are down 17%.

AMERICAN STANDARD

The industrial manufacturer shut down its corporate data center after an LBO last March, cutting 35 staffers, selling the computers, and leasing the facility. Then, the company farmed out its financial and payroll information. Savings are \$2 million per year.

COPPERWELD

Short on revenues when the steel industry turned sour four years ago, Copperweld closed its data center and laid off 50 staffers before farming out its computing requirements. The company's systems budget has been chopped from \$8 million to \$4 million.

DATA BW

1960s and 1970s, serving as the complete computing arm for businesses that couldn't afford their own machines. If customers were at the mercy of the time-sharing company's software. And when the price of hardware tumbled in the early 1980s, the advantages of time-sharing disappeared. McDonnell Douglas' time-sharing revenues slipped 5% annually from the late 1970s through 1980.

So time-sharing companies came up with an idea: outsourcing. You develop your own software, they told customers, and be the master of your computer strategy. We'll just run it. This shift proved enticing. During 1988 LBO, for instance, Trane Co., manufacturer of air conditioners, shut down three computer centers, laid off 35 staffers, and hired McDonnell Douglas as its outsourcer to tune of \$5 million annually for the next five years. McDonnell Douglas now has 400 customers, and its \$10 million in computer-services revenue is growing by 11% per year. Litton sales are up to \$100 million and growing 25% annually. Even four-year-old Genix Enterprises Inc., a spinoff of National Steel Corp., turned a \$5 million profit on revenues of \$27 million for the fiscal year ended last March.

Customers are taken with outsourcing's possibilities. "It lets us cut dollars and creative manpower developing software that can have the most impact in our business," says Gary J. Biddle, corporate vice-president of information systems at American Standard Inc., which was involved in a 1988 LBO. Since it began outsourcing, the maker of plumbing, building, and transportation goods has cut its information systems costs by \$2 million annually.

'HUBRIS.' The economics of the mainframe-computer business helps explain why. Mainframe manufacturers continue to charge dearly for software to run their computers, even as prices of their machines drop. In some cases, the cost of a mainframe operating system, or basic software, amounts to as much as 11% of the price of the overall system. For many of Litton's customers, says John G. Worth, vice-president of business development, "these would be unbearable prices to pay." And, outsourcing picks up the tab for operating system software.

Perhaps the most ironic twist in the outsourcing boom is that at many companies its leading proponent is the chief information officer. The managers oversee corporate computing centers and generally want

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protect them. But, more than the data processing techies they have replaced, they are also obligated to help the company achieve its business goals. Outsourcing might shred the data processing department, but CIOs usually see it as a way to save money—and spotlight themselves. "It's hubris to keep a team in place if it hurts the company financially," says Biddle. "It may be a hard lesson to learn, but you don't really have the hardware to prove you have value to your company."

Although outsourcing is on the rise, many analysts are viewing it with skepticism. To them, it's a Band-Aid for companies that are on the ropes. Once a company becomes healthy, they add, it will want the control that comes from running its own computers. Says Dan M. Brophy, a director of information technology at systems consultant Andromeda Young: "Computing systems are so strategic to a company's survival that thriving companies could compete without having their own."

VICTIMS. Not so, counters William Morgan, Copperweld Corp.'s vice president of information systems. Copperweld was an ailing company four years ago when it started outsourcing. "We're one of the most vibrant players in the steel industry, and I just renewed my outsourcing contract." He says it's worth using outsourcers to avoid problems involved in maintaining hardware and software, managing workers and worrying about computer downtime.

Outsourcing has its victims: the thousands of computing center employees who have been laid off. Indeed, the group is growing so quickly that some of the fledgling industry are developing conscience about them. Genix recently started a free placement service that finds jobs for displaced workers. One outsourcer, though, says that data processing jobs are scarce these days, so that placement programs are unlikely to be very successful. Says F. Mark Hermann, senior vice-president of system integration at McDonnell Douglas: "The best we can say is that as more companies use our services, we hire more off data processing people."

Now that outsourcers are able to tap on upwardly mobile customers, the challenge is to convince corporations without checkered records that they don't need their own computers. They will take some persuasion. Many companies compare the size of their information systems with that of the competition as a gauge of success. But many outsourcers feel they hold the trump card: Savings speak, and the numbers are in their favor.

By Jeffrey Rothfeder in New York

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LITTLE QUARTERDECK THROWS ITS WEIGHT AROUND

A new patent may force big software makers to pay royalties

Therese E. Myers isn't the kind to forgive and forget. Back in the fall of 1984, when Myers, president of Quarterdeck Office Systems, launched the software startup's initial product on a \$14,000 budget, she recalls being brushed off by the chairman of Microsoft Corp. "Bill Gates said we'd never make it," recalls Myers. "Now he's an expert witness to our success."

Indeed, Myers, 44, thinks she may have the 33-year-old Gates and his Redmond (Wash.) company over a barrel. In April, Quarterdeck won a U.S. patent for technology used in Desqview, its program written by Gary W. Pope, 38, the company's co-founder. The \$129 package makes it possible to work on several tasks at once by isolating them in numerous so-called windows on a personal computer's screen.

Quarterdeck contends that the patent will force other software makers that mimic its technology to pay millions in royalties. That money is enormously important to Quarterdeck, which had revenues of just \$12 million last year and operates from cramped headquarters in the beach community of Santa Monica, Calif.

SWORD FIGHTS. Just when, and from whom, the privately held company is going to get all this money is still open to question. Quarterdeck says its lawyer is negotiating licensing agreements with at least half a dozen software companies—but it won't say which ones. It does say that it hasn't yet met with Microsoft, which expects to remain unaffected by the new patent, according to Microsoft's in-house counsel, William H. Neukom. But that hasn't kept Quarterdeck from beating its chest.

"The patent will be used as a sword against them," promises Quarterdeck lawyer Gary A. Hecker.

Quarterdeck's pursuit of Microsoft goes back half a decade. In 1984, an early version of Desqview reached the market just before Microsoft's Windows,

view. "I couldn't live without it," John R. Garman, an information systems planner at NASA's Johnson Space Center in Houston. Customers say software can run as many as 65 programs on a screen at once. Windows runs multiple screens, too, but Quarterdeck's Desqview has one big advantage. It already is designed to work with about 90% of the applications programs now on the market. By contrast, to take advantage of all of Windows' features, software packages must be rewritten specifically for it.

Quarterdeck is launching a new strategy to communicate these advantages to PC buyers. In the past, it relied primarily on mail-order sales through ads in trade books. But it

to double its five-year sales force this year. Myers believes that its new effort will help boost sales to retailers. Next month, Quarterdeck will open a plant in Ireland. It should help it hold down costs and sell more copies of Desqview in Europe, which now accounts for 15% of the company's sales. The goal is to triple overseas sales to \$50 million of revenues by 1990, Myers says.

Another key part of Quarterdeck's strategy is to forge alliances with computer makers, which will ship the software with their machines.

Quarterdeck's 1986 deal with AST Research Inc. boosted sales dramatically, and Quarterdeck hopes a new arrangement with Tandy America Inc., which is bundling Desqview with its T 5200 laptop, will have the same effect. Advanced Logic Research Inc. in Irvine, Calif., also includes Desqview with the 3,000 PCs it ships monthly.

Quarterdeck executives know they need to expand their product line to avoid becoming one of countless boutique software makers—companies that can't get beyond one or two successful products. Indeed, some 70% of Quarterdeck's sales come from Desqview. To guard against the day when those sales slip, Quarterdeck is working on applications software for local area networks.

Many think the company's biggest asset is Myers. Says Quarterdeck spokesman Frank LaHaye, a venture capitalist, "Terry has the tenacity of a guerrilla. That's a fact that Microsoft and others will likely discover as Myers comes to grips with her new patent."

By Patrick Cole in Santa Monica and Deidre A. Depke in New York

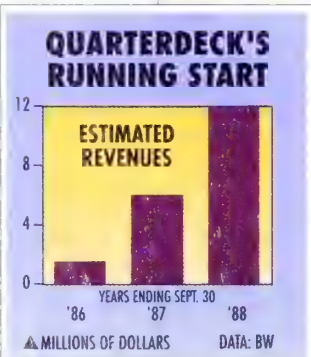


POPE AND MYERS: ESTIMATES OF LICENSING FEES RUN AS HIGH AS \$50 MILLION

which also can perform multiple tasks. Microsoft's huge marketing resources nearly buried Quarterdeck, and Myers considered bankruptcy. "The survival odds were awful," she recalls. Things have improved a bit since then. Market researcher Dataquest Inc. says that last year, Quarterdeck sold 240,000 copies of Desqview, vs. Windows' sales of 1 million copies. Still, only 2% of all PC buyers own Desqview, says researcher Info-Corp, whereas 7% own Windows.

Myers says Quarterdeck did manage its first operating profit in 1988. But it hasn't come close to recouping its \$6 million in startup costs. That's why the patent is so important: A Quarterdeck investor projects that the company could reap \$50 million in fees within 10 years.

That might give it enough money to build on the small but enthusiastic following for Desq-



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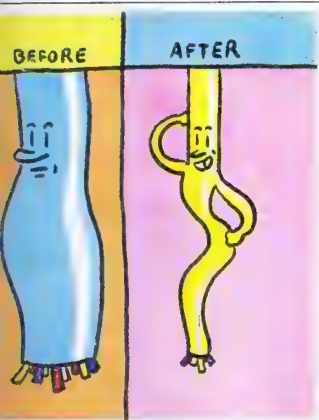
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BY DEIDRE A. DEPKE

BYE NOW YOU CAN AFFORD LINK UP ALL THOSE PCs



Many companies that want a PC network change their minds once they discover how expensive networks can be. Enter Ungermann-Bass Inc., which has developed a technology that lets high-speed networks run over telephone wire instead of bulky cable. UB says the small wire, which can be laid under carpets instead of in special ducts, makes it

to set up and maintain networks. Moving a networked old cost as little as \$20 vs. up to \$2,000 now. Wiring will be part of UB's network system, but work to meld the technologies won't be finished for a year. Ralph K. Ungermann says his network offers more station and software capacity than most companies need anyway. UB announced the product in May to give buyers, companies with thousands of workstations on a network to develop plans. "Wiring choices are 5-, 10-, 15-year, million-dollar choices," Ungermann says.

SURPRISE ENTRY IN THE SUPERCOMPUTER RACE

Did the next supercomputer challenge come from—China? Likely, maybe, but not for lack of will. China claims that any computer, built in 1983 by the National University of Science and Technology in Hunan Province, can process 100 million instructions per second. That's about half as fast as the Cray supercomputer, which came out in 1976—but it's plenty fast. In 1986, the school made a second supercomputer and sold it to the Petroleum Ministry for use in geophysical exploration. That's the only order it has received so far. China's makers would love to produce more, but they are being held back by Beijing's austerity program. They can't get funding from the state to design a more advanced machine, and local customers in China can't raise the money needed to buy one. Exports might be an answer, except that the government won't cough up the money for marketing. "We are a long way from being able to compete with the U.S.," says Wu Ding, director of the foreign affairs office at the university. Prices, he adds, are negotiable.

UNISYS DECIDES THAT MAKING 'EM IS BETTER THAN BUYING 'EM

The first time ever, Unisys Corp. has begun making its own PCs. Last month, the \$10 billion mainframe maker assembled its Personal Workstation² Series 300 PCs at Burroughs Corp. plant in Flemington, N.J. Until now, Unisys purchased PCs from others, then sold them with the label. The Series 300 had been made by Lucky-Goldstar, a Korean conglomerate.

Assembling its own PCs is part of a wider plan to do more in-house design and manufacturing of desktop machines. Other PC assembly will likely be moved inside in the future, says Armond Newton, a Unisys vice-president. "We'll look at it on a quarter-to-quarter basis," he says. The strategy lets the company get control of manufacturing costs and respond more quickly to changing market conditions, Newton says. Unisys also wants to make desktop systems a bigger part of its revenue mix, analysts say, by using the manufacturing technology and personnel that it got when it bought Convergent Technologies Inc. last year. Unisys says it will sell \$2 billion worth of workstation and PC products in 1989.

NOW WESTERNERS CAN LEARN CHINESE IN ONE EASY PROGRAM

Thousands of characters, each distinguished by subtleties in pronunciation and brush strokes, make Chinese the most difficult language for Westerners to learn. That's why researchers at Dartmouth College developed an interactive program for Apple Computer Inc.'s Macintosh that helps students pick up nuances in Chinese using electronic flash cards.

Programmers and professors developed the program, called Hanzhi Assistant, to go with Apple's Hypercard program. For each character, students using the software can hear a pronunciation recorded in Beijing by Chinese radio announcers. They can see the character written out, brush stroke by brush stroke, as recorded on an electronic graphics tablet from original Chinese calligraphy. And the program offers a translation and phonetic breakdown. Dartmouth undergraduates have experimented with a 300-character version. Now the college is looking for \$10,000 to \$15,000 to finish a collection of 2,000 characters. It hopes to release the data base commercially on compact disk later this year.

SPECULATORS MAY SOON TAKE A FLIER ON COMPUTER CHIPS

Memory Clearing Corp. says it isn't trying to start trouble, it just wants to give speculators an alternative to pork bellies and to let computer makers hedge against rising prices. The company hopes to work with the San Francisco-based Pacific Stock Exchange trading futures contracts on dynamic random-access memory



(DRAM) chips. The chips are subject to wildly fluctuating prices and supplies. Chip futures ostensibly would let computer makers and other buyers lock in prices and supplies. The Twin Cities Board of Trade in Minneapolis has a similar plan.

But the proposals raise the ire of both producers and customers, who aren't interested in such middlemen. DRAMs aren't commodities, they say, because they vary widely by speed, packaging, and quality. What's more, price swings aren't the problem they used to be: Trade sanctions have stabilized supplies from Japan, which produces most of the world's DRAMs. And the big U.S. DRAM maker, Texas Instruments Inc., has persuaded buyers to pay in advance to guarantee delivery.

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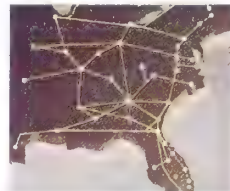
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CARSEY AND WERNER VISIT A DIFFERENT WORLD: AN OVERHAUL BOOSTED ITS RATINGS

AN THIS TV TEAM GO FIVE FOR FIVE?

Carsey-Werner will try to extend its winning streak this fall

he started her show-business career as a tour guide at NBC's New York headquarters. He graduated from Harvard University and made documentary films. Today, Marcy Carsey, 39, and Tom Werner, 39, are the hottest vision producers in Hollywood. Their programs—*The Cosby Show*, *Roseanne*, *A Different World*—were the three rated shows of the network season ended in April. That's the first time a company has ever held the win, the, and show spots in a single year. Now, with a fourth show scheduled to premiere in September and a fifth a few months later, Carsey-Werner Co. is likely to have more network programs on air than all but three of Hollywood's major studios.

Carsey-Werner had to struggle to rise to the top. Carsey took the first step in 1980, when she left a cushy job at NBC's senior vice-president in charge of prime-time series to produce her own shows. Werner, who was Carsey's assistant at ABC and succeeded her when she joined her a year later in a one-room office above a 7-Eleven store in Hollywood, Calif. The duo went so heavily into debt to start their company that ABC had trouble paying their phone bills. In 1983, ABC quickly canceled their

first sitcom, *Oh Madeline!*, with Madeline Kahn. A made-for-TV movie, *Singles Bars*, *Single Women*, also flopped.

Their luck changed in 1984, when NBC asked them to develop a sitcom featuring Bill Cosby. Carsey and Werner liked the idea so much that they spent all their savings in the first year of the show to pay the production expenses not

CARSEY-WERNER'S HIT PARADE

Program	Syndication date	Estimated value Millions
THE COSBY SHOW	Oct., 1988	\$515
A DIFFERENT WORLD	Sept., 1991	100
ROSEANNE	Sept., 1992	175

DATA: VIACOM, BW ESTIMATES

covered by NBC. It was a smart investment. *Cosby* has topped the ratings for four years straight and almost single-handedly catapulted NBC to the top of the network heap. The program repaid the producers handsomely in 1988, when Viacom Inc. syndicated *Cosby* reruns for a record price of \$515 million (table). Carsey-Werner, Viacom, and Bill Cosby each own about one-third of the show.

Carsey-Werner demonstrated last year that the company hadn't run out of ideas with *Cosby* and a spinoff, *A Different World*. The partners gave ABC an instant smash with *Roseanne*, starring comedienne Roseanne Barr as a tart-tongued working mother of three. Carsey-Werner will try to make it four for four in September with *From This Moment On*. The show features comedian Jackie Mason as a Jewish social worker who falls in love with a Catholic woman, played by Lynn Redgrave. ABC will give Mason's show a strong send-off by airing it on Tuesdays right after *Roseanne*.

That kind of scheduling can help a show, but it can't guarantee success. Some advertisers who have seen early footage fear that Mason's fast-paced delivery, which worked in Catskill resorts and on Broadway, won't appeal to audiences outside of New York. Carsey and Werner disagree, though they are making adjustments.

BLUE-COLLAR HEROES. They have doctored shows in the past. Last year, they performed surgery on *A Different World*. The show inherited big audiences from *Cosby*, which preceded it, but researchers found that viewers were unimpressed with the spinoff. Carsey-Werner added a new director and writers, dropped the star, and made plot changes. The ratings improved.

Network executives say audiences like Carsey-Werner shows because they're built around believable characters who deal with everyday concerns. "When we decided to do *Roseanne*, I couldn't believe there weren't any good shows about working mothers," says Carsey, a mother of two. "About 65% of mothers work, and most of them just barely make it through the day." Carsey-Werner is working on another blue-collar comedy, *Grand, Pa.*, which NBC plans to introduce in January.

Once Carsey and Werner come up with a strong idea for a show, they hire top directors and writers to shape the production. Next, they offer some of this behind-the-camera talent a percentage of a show's profits. That's an unusual deal in television, and it works: Carsey-Werner won the services of director Jay H. Sandrich by giving him a piece of the action in *Cosby*. Sandrich had previously directed such TV classics as *I Love Lucy* and *The Mary Tyler Moore Show*.

Carsey and Werner know all too well how fickle prime-time TV audiences can be. To keep couch potatoes faithful as well as happy, they're spending big and giving viewers top talent along with strong story lines. So far, that combination has been right on the money.

By Ronald Grover in Los Angeles

SO YOU THINK BUYING A SICK THRIFT IS JUST A LICENSE TO PRINT MONEY

Don't tell that to Bill Gibson. He took on a dozen S&Ls—and got some nasty surprises

As Congress struggles with the savings and loan mess, one concern is that new owners get a free ride to Easy Street. "Take this bleeding thrift off our hands for a pittance," the regulators say, "and you can make a mint." But there is a catch. For the new investors, it's buy first, inspect the books later. The surprises—and strains—can make for real-life business drama. Here is how one story is unfolding.

Technologies Inc., where Easterling was then treasurer. He reached Beasley on a Saturday morning, interrupting a backyard chat with a neighbor about lawn mowers. Beasley liked Easterling's pitch, and he remembered Gibson from their days in the Nixon Administration—Gibson as a Council of Economic Advisers staffer, Beasley as a Treasury Dept. official. After three days of round-the-clock discussions, Lone Star kicked in

because he didn't even know what he owned. The records of AFB's 64 subsidiaries were in a mess, and new ones kept popping up well into December. One subsidiary had foreclosed on a building that housed an abortion clinic. Other subsidiaries owned Pine Ridge Winery in the Napa Valley, an aircraft leasing outfit, and a film-distribution company that holds the rights to *Tomb Raider*. Gibson aims to clean up the *Chainsaw Massacre*. Gibson aims to clean up



'Next to my birth, it's been the most exciting thing ever to happen to me'

WILLIAM E. GIBSON



ONE HOLDING GIBSON WANTS TO SHED IS THIS NAPA VALLEY WINERY

For William E. Gibson, the first jolt came last August, just 10 days before he was set to acquire a clutch of insolvent thrifts. Despite the promise of \$1.3 billion in federal assistance, his big backer, Equitable Life Assurance Society of the U.S., got cold feet when the Federal Home Loan Bank Board sped up the pace of negotiations. Gibson scrambled to find another candidate willing to pony up \$50 million for the dozen thrifts with \$9.2 billion in assets—of which a frightening \$1.9 billion are bad or souring loans.

No luck. Desperate, Gibson's partner Ed Easterling called William Howard Beasley III, chief executive of Lone Star

the necessary cash. That Thursday, the U.S. turned over the 12 casualties to a new Lone Star subsidiary: American Federal Bank in Dallas.

Gibson, a 45-year-old University of Chicago economist who once worked for McGraw-Hill Inc., publisher of *BUSINESS WEEK*, long had wanted to run his own bank. But despite stints at RepublicBank Dallas and Continental Illinois Corp., Gibson wasn't prepared for what lay ahead. When he first walked through a branch immediately after signing the deal, Gibson saw some tellers crying. Others asked their new president and CEO what would happen.

Gibson couldn't give a good answer

or close all but four subsidiaries, engaged in mortgage banking and insurance. "I don't think a thrift should make wine," Easterling says, though he admits the winery is profitable.

EASY CUT. Gibson also had to trim the thrifts' 69 branches and the dozen or so redundant data-processing systems. The easy cut was a branch that had almost no deposits but did serve as an exit for the previous owners to visit their corporate hunting lodge. Lopping off wasn't so easy. "Everyone wanted to be scientific," says Gibson. So he put a doctorate to work and devised a system for grading a branch's viability using 10 criteria, including location and deposit base. Just 20 branches passed. AFB kept six of the borderline cases to gain

t presence and closed the remaining halving the staff to 550. Gibson figures he cut costs by at least \$20 million. B is now marketing Gibson's computer model to other thrifts.

A big challenge was to shape up neglected assets, like one Dallas office complex that AFB inherited. It was just 10% occupied, and none of the tenants bothered to pay rent for more than a year. AFB resumed collecting rent and cleaned up the complex by landscaping and repairing the elevators. While the complex now is 30% full, the building still has to reach 85% occupancy to be viable. "And that won't happen for 10 years," says AFB Executive Vice-President Jeff Fritz.

So how does a thrift make money in today's environment? Gibson is getting back to basics, going all out to persuade would-be home buyers and consumers to borrow from AFB. In March, branch managers were given monthly quotas to include targets for new deposits. The branch manager scattered toy cars around the office, hoping to prompt customers to ask about auto loans.

NE FISHIN'. Gibson insists that the only way to stabilize thrifts is to bring down deposit rates. The old owners kept the thrifts afloat by paying some of the highest interest rates in the land. Last year, Gibson slashed jumbo CD rates to 10%, from 10.75%, a move that drove \$10 million from the bank. But many solvent thrifts in Texas remain willing to bid up rates to grab funds. Says Gibson: "Those banks scare me because they could still do something to siphon our deposits."

The Federal Savings & Loan Insurance Corp. is another source of frustration. "I've had three case managers in the last six months," says Fritz. "And each one with a different set of criteria." The latest FSLIC demand: a reappraisal of AFB's inventory of raw land. That could cost \$180,000.

Still, life is beginning to settle down at AFB's executive staff. After weeks of sleeping on Easterling's couch and staying in a rented house, Gibson, a native Texan, is finally buying a home in Dallas and relocating his family from Chicago. He's planning a fishing trip with Easterling and Fritz. But they aren't yet too settled—they're already planning to take over more of the AFB's thrifts.

Why go through all this again? Gibson won't talk about salary and the like, but the thrift, buoyed by federal subsidies, managed to earn \$5 million for the first quarter. Dallas FHLBB President George Barclay calls Gibson's performance "extraordinary." Says Gibson: "Next to birth, it's been the most exciting thing ever to happen to me."

By Kevin Kelly in Dallas

INSURANCE

A GIFT FOR THE DYING —OR SHEER GHOULISHNESS?

Living Benefits pays the terminally ill to name it beneficiary

Suffering from AIDS, lacking health coverage, and unable to work, Terry was almost destitute. Among his few remaining assets was a \$100,000 life-insurance policy, payable only on his death, which was expected within a year.

Then he connected with Living Benefits Inc., which buys policies from the terminally ill. Terry, 31, named the Albuquerque venture his beneficiary, and the company sent him a check for \$66,000. "I don't know where else I would have turned, financially. It's going to make my life a lot easier," says Terry, a for-

mer 37-year-old president, the effort isn't ghoulish, it's humanitarian: "We're providing a service to the terminally ill. Money is freedom. They're overjoyed we exist." Worley, who is also an independent insurance agent for many companies, says that impoverished policyholders near death often "let the policies lapse," getting nothing from all the premiums they have paid. Worley says he has 45 applications pending, nearly all from AIDS patients, and hopes to make up to 250 benefit purchases this year.

Although life insurance companies

won't buy benefits, some offer variations. In Canada, Prudential Insurance Co. lends any terminally ill policyholder up to 75% of the face value, deducting about 10% in annual interest from the final death benefit. In the U.S., Jackson National Life Insurance Co. offers policies that pay 25% of the face value to patients with such illnesses as cancer or strokes.

NO BAN. Early payouts do have drawbacks: They're taxable, and by swelling a patient's income, they could mean a medicaid cutoff. And already there's the worry that unscrupulous operators may appear and prey on the desperate. "I don't want some

poor guy whose doctor told him he has a year to live to sell his \$100,000 policy for \$20,000," says Ted Knight, New Mexico's insurance commissioner.

Knight tried to ban benefit sales, but instead, the state legislature gave him strong regulatory power. Now he would like to create a seller's market by setting minimum payouts and encouraging competition.

That brings an unsettling vision of the terminally ill hawking their policies to the highest bidder. But to sufferers such as Terry, selling death benefits may be the only way of buying a decent life for the few months they have left.

By Sandra D. Atchison in Albuquerque



WORLEY CLAIMS HIS EFFORT IS HUMANITARIAN, NOT PREDATORY

mer Washington lobbyist who will spend the money on medical expenses and an air conditioner.

Since its founding six months ago, Living Benefits has bought six policies, with face values totaling \$731,000, all from AIDS patients whose doctors gave them less than two years to live. But that's enough to cause an uproar among insurers. "It stands the insurance principle on its head," says Robert Waldron, an official with the American Council of Life Insurance. His argument: Life insurers bet that policyholders will live a long time, but Living Benefits "has an economic interest in death."

Yet to Rob T. Worley Jr., Living Bene-

CONDO TIME-SHARING TRIES TO LIVE DOWN ITS PAST

New players Disney and Marriott could help polish its image

The time-sharing business is trying to go straight. Imported from Europe in the mid-1970s and since sold to some 1.3 million Americans, time-shares have a reputation that's—well, shady. The M. O., often, was to lure people with cheap gifts and then sell them rights to a week or so a year in a shabbily refurbished motel or a white-elephant condominium.

But now, with white hats such as Marriott Corp. and Walt Disney Co. moving in and sales purring along, there's hope for an image overhaul. Marriott's time-share subsidiary has bought or built six developments in the past five years. Later this year, Disney will unveil ambitious plans for "ownership villas" near its Orlando parks. Peter Rummell, president of Disney Development Co., says the company aims to have time-shares near its Paris and Tokyo parks, too.

And it seems Disney and Marriott aren't alone in offering an improved product. Prodded by legislation on the state level, the industry has cleaned up its act. In Florida, home to 22% of the 1,100 time-share developments in the U.S., officials say they are fielding fewer complaints. And industry surveys now show the majority of longtime owners are pleased with their purchases. Heartened, promoters have about 100,000 new units under way for this year, and sales are heading for a record \$2 billion. The average price may rise 6%, to \$9,000. That lets you in one week a year, forever. **'SUCKERED.'** Unfortunately, new troubles could be brewing as growing num-

bers of owners look to resell. For example, John Shufflebarger, a retired school teacher in Venice, Fla., wants out of his North Carolina mountainside villa. "I've got no use for it now," he says. "But I can't get rid of it."

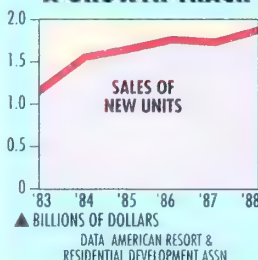
Industry watchdog Clinton Burr fears that owners are falling prey to "another

breed of scams." Burr, founder of the Resort Property Owners Assn. in Northbrook, Ill., represents time-share buyers. Sure enough, ever-astute ripoff artists are quickly sliding over to the resale side of the business. In Florida, regulators now get some 500 angry letters and phone calls a year about resale agents. Consumers in other states find the same problem. Take George Knudson of Knoxville, Tenn. He has been trying to



GDC'S EHRLING AND BROWN: THEY INSIST FEW BUYERS WILL WANT TO RES

TIME-SHARING IS ON A GROWTH TRACK



sell his Gatlinburg (Tenn.) time-share for two years without luck. In 1987, he paid one firm \$400 to sell it, he says, but never heard from them again: "I guess they suckered me."

A few developers have heeded the warning signs

and are assuming some responsibility for resales. Marriott will attempt to resell units for customers at the going rate for a new one, minus a hefty 25% commission. ITT Corp.'s subsidiary, which is using time-shares to promote a community development in Palm Coast, Fla., will apply the amount a time-share

owner has paid toward the purchase of a home in its development.

But most builders insist few buyers will even want to resell—either because they will be so satisfied or because they can swap their weeks with other resorters. "We don't talk about tax advantages on real estate deals," says David F. Brown, chairman of General Development Co., Florida's largest developer of planned residential communities. "All we talk about is vacation experience."

'LEGITIMATE BUSINESS.' GDC, which bills itself as the largest time-share manager in the U.S., made a splashy entrance into the field in 1986 when it bought a plush Orlando resort, Vistana. Last month, GDC bought Glen Ivy Financial Group Inc., based in Corona, Calif., for \$65 million in cash and notes. Glen Ivy manages 11 resorts from Texas to Hawaii. GDC is staffing its vast network of sales offices with 200 more agents.

sell unit-weeks. "Time-shares will account for as much as 35% of GDC's revenues by next year," says President Robert F. Ehrling. The builder couldn't get the boost. Earnings were down in 1987, and the first quarter disappointed analysts, too. GDC is also faced with dozens of lawsuits filed by buyers charging with fraudulently overpricing homes. GDC denies any fraud or overpricing.

Clearly, the biggies see time-sharing's shady past as fading. "We looked at the pluses and negatives, and we concluded it's a legitimate business," says Disney's Rummell. And customers agree, if getting out becomes even as easy as getting in.

By Antonio N. Fins in Miami

"Creativity demands more than a good idea."

—John C. Jay
Creative Director, Bloomingdale's.

When Bloomingdale's wanted to create a new vision of international style for their "Islands in the Stream" campaign Creative Director John C. Jay looked to the Color Laser Copier. "In Fashion, sensibilities are shifting to a more sophisticated sense of color inspired by impressionistic painters like Gauguin. The Color Laser Copier allowed us to capture this feeling and enhance our idea further."

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Fashion Photos by Lance Sandler

MEET BIG, BAD BEAR MILTON BERG

A maverick who called the '87 crash says it isn't over yet

With whiffs of an easier monetary policy and high hopes that the economy will land softly, Wall Street can't resist some bullishness. Firms are cranking out so many buy recommendations that the crash of 1987 seems like nothing more than a bad dream. But to Milton Berg, the crash is still very real—and only a month or so away from entering phase two.

"This rally is just a postcrash syndrome," a short-lived upswing of the sort that historically follows any stock or commodity crash, says Berg. The 38-year-old maverick has bold plans for capitalizing on the next round of market mayhem—and he has a knack for detecting around-the-corner disasters. In September, 1987, when he was managing about \$500 million for Oppenheimer Management Corp., he issued a 33-page report called *The Fat Lady Is Singing* that said the bull market was doomed.

Berg's report included charts of about 30 economic and market indicators and concluded that "it seems prudent to give the bears the benefit of the doubt." By late September, he was rushing money from stock into cash. Ordered to get back into equities, he did so for a while, then disobeyed. When the full fury of the crash devastated stocks on Oct. 19, Berg was more than 90% in cash. The reward: His funds were the year's top performers. The Oppenheimer Ninety-Ten Fund scored a total return of 94% from price gains and income, while the Oppenheimer Premium Income Fund had a 45.6% return.

HEDGEHOG. Soon after, in February, 1988, Berg joined Steinhardt Partners, a hedge fund that speculates in securities and options. There, Berg turned in a pre-dividend return of 29.7% for the rest of 1988, besting the 6.1% rise in the Standard & Poor's 500-stock index.

Eager to work for himself, Berg left Steinhardt in March, 1989, to set up

Berg Partners and its Oasis Fund, which will also specialize in short sales. "Wall Street is geared to a bull market. It's the whole casino attitude. People are so overconfident," says Berg. With his wife, Rachel, as marketing manager, Berg has rounded up commitments for \$20 million by July. That would be just in time, he figures, to get in on the crash's less violent but longer-lasting next phase.



WHY BERG IS SO DOWN ON STOCKS

- ▶ T-bill rates are too high; they should be 6¾% for stocks to rise
- ▶ The money supply, adjusted for inflation, is shrinking
- ▶ Institutions already have more than 94% of their assets in stocks, so there is little cash to fuel a rally
- ▶ Too many investors are optimistic about the market, which is always a setup for a fall
- ▶ Too much debt threatens to be a drag on profits and economic growth

What has convinced Berg that the rally is tiring? The same measures (table) of Federal Reserve Board policy, liquidity and technical market action that alarmed him in 1987. For one, a 20% rise in the three-month Treasury bill yield usually signals a stock market slump, Berg believes. And T-bill rates are almost 1% higher than they were in early 1987, meaning a stock market correction is overdue. The recent dip in rates, however, has not been nearly enough to outweigh the big runup.

HITTING THE BARS. One way Berg likes to play the bear market is to short stocks of companies with weak balance sheets that "got caught up in the craze," such as Banner Industries and Stone Container Corp. Berg experienced short seller: In 1983, when Coleco Industries Inc. wouldn't let him inside a computer plant, he talked workers in nearby bars and lunch

ettes. Convinced that the company was way behind its production schedule, he bought \$650,000 of put options. When Coleco shares plummeted a few months later, Berg sold his options for a handsome profit of about \$1.85 million.

Timing market turns is a risky business, and Berg has been wrong before. He missed out on a lot of the 1988 market rally. And he has had two bad years. For example, in 1986, the Ninety-Ten Fund that he managed was down 4.4%, and the Oppenheimer Premium Income Fund was up only 1% in a year when the S&P 500 was up a shiny 19%.

Berg also has a history of courtship controversy. He even sponsored a Wall Street fund-raiser for Rabbi Meir Kahane, leader of the militant Jewish Defense League. He had several public tiffs with his employer, Oppenheimer Management Corp., over what Berg saw as his meager earnings of about \$300,000 in 1987. He was vindicated when he made \$3 million in 1988 at Steinhardt.

Jon Fossel, president and chief executive of Oppenheimer Management, says that his former employee was just smart and opinionated to be a team player. "If Milton took an IQ test, he'd approach the genius level," says Fossel. But he's "never neutral. He's either a roaring bear or a raging bull." No matter how much of a genius, all Berg needs is a roaring bear market.

By Leah J. Nathans in New York

Your boss wants you to do a million things at once. Tell him you'll do five.

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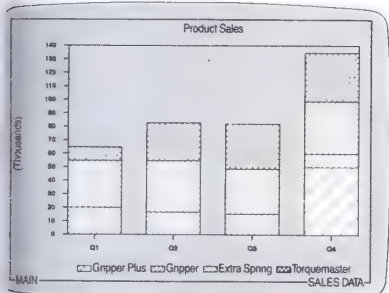
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Extra Spring	\$10,000	\$28,000	\$34,000	\$39,000
TorqueMASTER	\$10,000	\$28,000	\$34,000	\$37,000
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Wain	Northwest	45	22	25
Ballard	Northeast	13	45	26
Polovich	South	13	45	26
O'Malley	Central	24	45	17
Lynn	South	12	13	45
Roline	Southwest	78	15	63
Waring	Southwest	65	78	23
Plavin	Central	67	45	32
Rehoboth	South	25	64	89
O'Brien	Northwest	56	38	21
Vinels	Southwest	54	67	89
Timmons	Northeast	45	68	94
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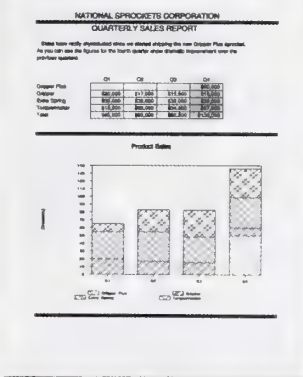
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BY GENE G. MARCIAL

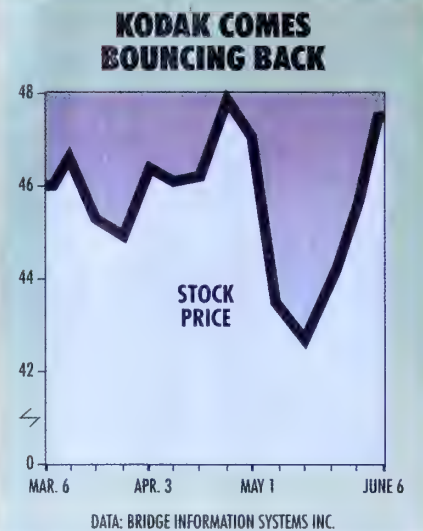
KODAK AND POLAROID? OR GE? HOW ABOUT DISNEY?

Eastman Kodak, one of this year's market laggards, is showing some flash again. Word is out that the company may be on the hit list of financier Carl C. Icahn, who is now flush with \$2.1 billion from his sale of Texaco stock on June 1 (page 40). After falling from \$48 a share to \$42 in early May, Kodak bounced back to 50½. Indeed, Kodak presents a situation that Icahn usually likes: lots of room for cost-cutting, depressed earnings, and undervalued assets.

But forget the Icahn rumors. Some pros are snapping up Kodak shares because they believe that Kodak will sell some of its assets to Polaroid as part of a damage settlement arising from its loss to Polaroid in a patent-infringement suit. The U.S. District Court in Boston is currently holding hearings to determine the amount, which some analysts think will be as high as \$1.5 billion. The two companies might also enter into a joint venture as part of the court decision. "Talks are still in the informal and exploratory stage, and they could fall through for any reason," says one investment strategist for a large New York investment bank. A Polaroid spokesman said it was possible for Polaroid and Kodak to negotiate a settlement, but he couldn't comment on whether or not such talks are going on.

STAR POWER. "Kodak's management knows that once the Polaroid issue is out of the way, the company will be a sitting duck for raiders and takeover artists," says one major Boston money manager. Whispers are that after settling with Polaroid, Kodak may pursue a friendly merger with General Electric. Another likely Kodak suitor, he says, is Walt Disney, which recently signed a 15-year participant's agreement with Kodak that gives the Rochester (N.Y.) company exclusive rights to sell film, batteries, and cameras in all Disney-owned theme parks. Kodak film is also used exclusively in all Disney movies. Kodak, Disney, and General Electric all declined comment.

Asset-value investors figure that Kodak is worth around \$80 a share, based on its operating cash flow of \$8.64 a share. And that doesn't take into account the value of the Kodak name,



which is known throughout the world.

Don Zwyer, a special-situation analyst at Kidder Peabody, comes up with almost the same figure. He estimates the value of Kodak's imaging operations, including cameras, projectors, films, and batteries, at \$21.5 billion. The chemical unit, which makes ethylene and propylene used in plastic, paint, and auto parts, is worth \$6.4 billion, he figures. Kodak's third unit, Sterling Drug, which makes prescription and nonprescription drugs, including Bayer aspirin, is worth \$7 billion. Total estimated value, after deducting long-term debt of \$9.4 billion and a Polaroid settlement of \$1.5 billion: \$25.5 billion, or \$79 a share.

The Polaroid case has acted as a poison pill for Kodak, explains one arbitrageur. As long as the cloud of uncertainty existed, a buyout or merger was unlikely. With the court hearing well under way, that cloud is lifting.

WHAT'S BEHIND J&J'S ODD CLIMB

Something curious is happening in the stock of Johnson & Johnson: On the surface, it appears that a lot of selling is going on, yet J&J's share price is on the rise. And volume is running up as well.

Why? According to one veteran stock-chart watcher, the big buyers want to mask their purchases. How? They're patient. They buy shares only on the bid price and never chase the asking price, which is usually an eighth of a point higher. The effect: Buying occurs on a downtick, which makes it look as if demand for the stock is

weak. But the consistency of the buying ends up boosting the price anyway.

"Over the past two years, we have seen a number of takeover and restructuring candidates exhibit similar trading behavior," says a strategist at large securities firm in New York. He feels that a buyout bid for this major producer of such brand-name health care products as Tylenol and Band-Aid may be imminent. And he expects the bid of \$65 a share to come from European drug-and-chemical giant.

To thwart the attempt, Johnson & Johnson management might do a major restructuring, including a heavy buyback of its own shares. The stock selling at 48, up from 44 in March. Earnings should improve from \$2.87 share in 1989 to \$3.30 next year. spokesman says he wasn't aware of anything unusual going on.

HITCHING A RIDE ON THE FAX BOOM

With sales of fax machines surging, it isn't surprising that investors are on the lookout for a fax-stock play. One sure find: ChemDesign, a fast-growing custom chemical company that makes special compounds for the thermal paper used specifically in fax machines.

About 40% of sales of the young outfit, which went public in April at 13, come from reprographics products, including the chemical for the fax thermal printing paper. To meet the rising demand, ChemDesign has improved the technology of its custom reprographics compounds and has increased manufacturing capacity at existing facilities in Fitchburg, Mass. A few of its biggest customers: Du Pont, Appleton Papers, and Monsanto.

Total sales have boomed: They're up from \$4.5 million in 1984 to \$29 million last year. Earnings have been rising as well, to 53¢ a share last year from a loss of 12¢ in 1984. "We expect ChemDesign to grow as rapidly as the fax machine business," says Jay Harris, managing partner at Goldsmith & Harris, a New York investment firm. He figures that sales will jump to \$48 million this year, rising to \$68 million in 1990. Earnings of 90¢ a share are expected for 1988, with a leap to \$1.20 or \$1.50 seen for 1990.

"We think the stock, now at 16, will be as hot" as the company's rapid sales and earnings growth, says Goldsmith. He thinks ChemDesign shares will climb to the mid-20s.

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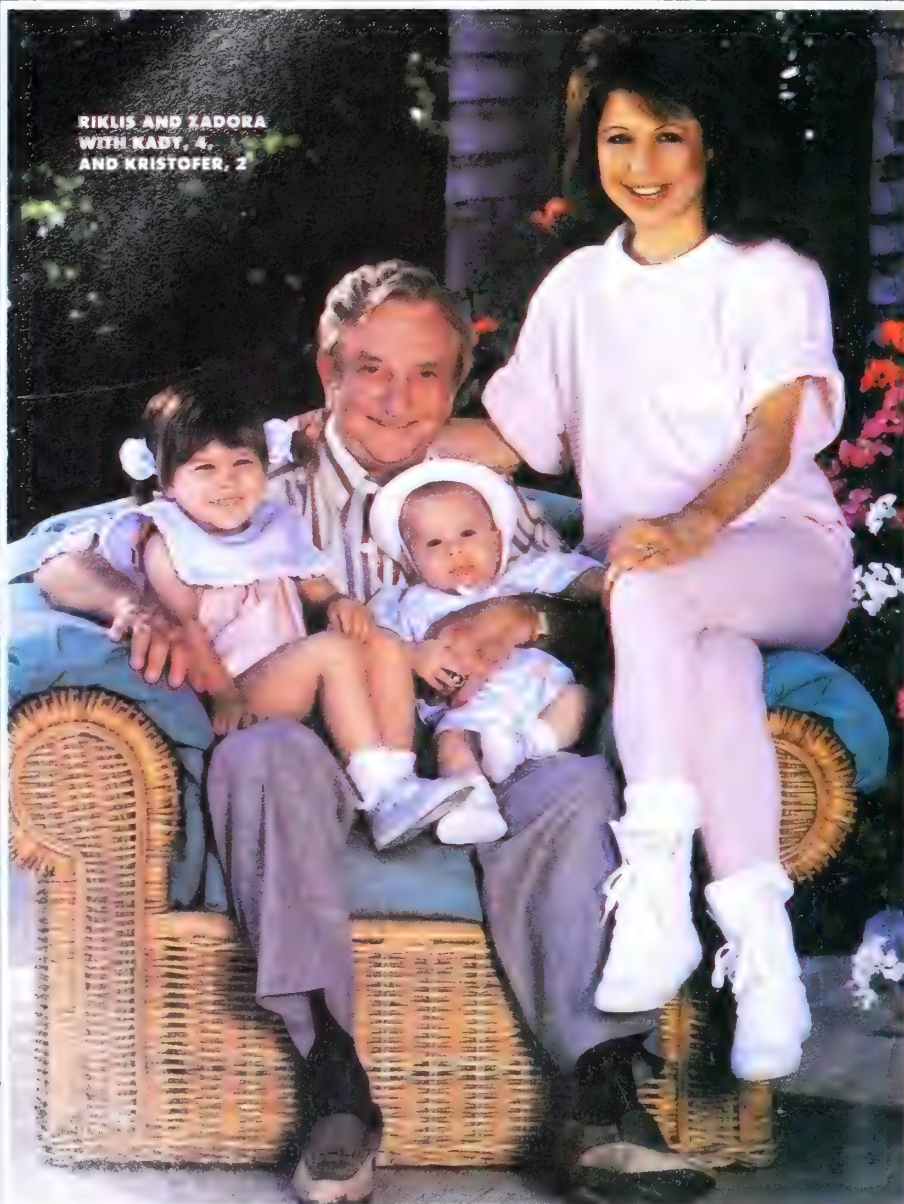
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RIKLIS' FANCY FOOTWORK MAY BE TRIPPING HIM UP

Bondholders are fuming over his flip-flop on Fabergé



RIKLIS AND ZADORA
WITH KADY, 4,
AND KRISTOFER, 2

Mikhail Riklis generally keeps his public comments to a minimum, much to the consternation of Wall Street. But among friends, the brazen financier is known as quite a storyteller. His favorite tale goes like this. In turn-of-the-century Russia, a messenger from the czar visits a Jewish village and demands to see the rabbi.

Unless the rabbi can teach the czar's dog to speak, says the messenger, soldiers will destroy the village. So the rabbi agrees, but with one condition: "I need 12 years to teach him." When the rest of the village panics, the rabbi tells them not to worry. "In 12 years, anything can happen," he says. "Maybe the czar will die, maybe the dog will die.

Or maybe the dog will learn to talk."

It's easy to see why Riklis likes the story so much. Starting in the 1950s with \$750,000 and a penchant for complex financial transactions, the 65-year-old empire builder has acquired dozens of well-known companies—almost entirely with debt. His Rapid-American Corp. has owned and sold liquor distributor Schenley Industries, International Text, Lerner Shops, and BVD, to name a few. Riklis' crop now includes Fabergé and its Elizabeth Arden unit and H.I. Holdings, the nonfood leftovers of his dismembered Beatrice empire. Because he relies so heavily on debt and depends on payment of principal by swapping old bonds for new ones at marginally higher rates, he constantly buys and sells bonds.

But the past few years have been rough for Riklis, who declined to be interviewed for this story. A dispute with Britain's Guinness PLC, which stemmed from its scandal-ridden 1986 takeover of Distillers Co., pushed Riklis into selling Guinness his valuable Schenley Industries Inc. for \$419 million. Rapid took a pretax loss of \$46 million on the sale. With \$807 million in long-term debt, Rapid lately has suffered mounting operating losses, and the company has had to turn to Riklis' private Riklis Family Corp. for money to fund operations and pay off debt. While Treasury bonds have slipped 5% over the past two years, privately held Rapid's 10% bonds, due in 2006, have fallen 37%, to 51%. Corporate bonds have tumbled similarly.

NO SALE. Now, Riklis has problems with a different set of bondholders. A year ago, he acquired E-II Holdings Inc. of American Brands Inc. for \$1.2 billion, also assuming \$1.5 billion of debt. He immediately took \$925 million in cash from E-II in exchange for Fabergé, which Riklis had owned since 1984—first through Rapid-American and then Riklis Family Corp. Several E-II bondholders sued in New York State court, claiming that Fabergé's value was half that of the best. The bonds' trustees later sued to demand more information about the transaction.

Riklis seemed close to settling the matter in February, when he agreed to sell most of Fabergé to Unilever PLC for \$1.55 billion. But the sale mysteriously fell through in May. Now, Riklis plans to keep Fabergé and is eyeing further acquisitions in the cosmetics business. His first target: Minnetonka Corp., licensor of Calvin Klein fragrances.

Minnetonka might make a good fit with Fabergé. But Riklis' head-spinning moves and E-II's secretiveness make E-II bondholders more nervous than ever. To date, Riklis hasn't missed any

nts on the bonds. But in the worst-
scenario—if E-II turns out to be in
fault because of the \$925 million
transaction—Riklis would have to cor-
rect the condition or pay off the \$1.5
million of bonds immediately.

Bondholders may be worried, but they
couldn't be surprised—Riklis has been
wheeling and dealing for years. After
growing up in pre-Israel Tel Aviv, he
earned a mathematics degree at Ohio
State University and began working as a
major stock analyst in 1951 at Piper,
Fray & Hopwood in Minneapolis. Har-
old C. Piper, chairman emeritus, remem-

bers Riklis as smart and
highly charismatic: "He
has lots of fun, full of
wish stories—a real
character." Riklis became
a broker, and before long
he had a few clients into
creating a pool of
\$100,000, which he used to
begin making acquisitions.
In his 1969 MBA thesis,
Riklis analyzed the early
years of his career, Riklis
described his strategy "the effi-
cient use, or rather non-
use, of cash."

CE-SAVER. Because a
large portion of his hold-
ings are closeted in Riklis
family, which owns 100%
of Rapid, it's nearly impos-
sible to tell how much Rik-
lis is now worth. But his
fortune is clearly huge:
and his second wife,
ear-old actress-singer
Zadora, travel in his-
hers Lear jets. Riklis
owns a huge townhouse in
New York, is building a
home in Malibu, and
recently paid \$7 million for

the grand Los Angeles mansion
owned by Douglas Fairbanks Sr.
Mary Pickford. Among the new
nities: a massive playroom for
daughter Kady, 4, and son Kristofer, 2,
a recording studio for Zadora. She
is unavailable for an interview be-
cause she needs to "save her voice" for
an upcoming record, her agent says.
Longtime employees of the Riklis em-
pire describe him as a benevolent baron.
He is known for generous benefits and
gifts, and insiders say he's an inspi-
rational leader. "Many thousands of peo-
ple look to him as a father," says J.
P. Lux, a lifelong McCrory Stores
employee and now president of the com-
pany. This June, Riklis is personally tak-
ing 2,000 McCrory employees and their
families on a company-paid, two-week
trip to Israel, Greece, and Egypt. The
trip includes visits to such Holy Land
sites as the Stations of the Cross.

The Riklis empire isn't necessarily a
comfortable place for newcomers,
though. In February, 1985, former Mont-
gomery Ward & Co. President Stephen
L. Pistner was hired with great hullaba-
loo and given a five-year contract valued
at \$12.5 million. He was to transform
McCrory, then with yearly sales of \$918
million, into a \$5 billion chain. Within 2½
years, he resigned abruptly, and both
sides declined to say why. Sales at
McCrory never surpassed \$2 billion.

Riklis' business style has not exactly
endeared him to Wall Street either.
Since 1981, when he took Rapid-Ameri-

may also have been designed to keep
any Fabergé losses off Rapid's balance
sheet. Meanwhile, Rapid could have re-
ceived steady earnings from Fabergé
preferred dividends, regardless of Fa-
bergé's reported results.

SCOTCH TREAT. His fancy footwork has
caused a few run-ins with the authori-
ties. In 1979 the Securities & Exchange
Commission brought a complaint against
Schenley, charging that it had granted
illegal discounts to certain purchasers.
Without admitting or denying guilt, the
company signed a consent agreement to
disclose information about its business
practices. In that same
year, Riklis signed another
consent agreement,
without admitting or deny-
ing guilt, after the SEC
charged him with having
one of his companies pay
fees to his personal credi-
tors. Riklis agreed to re-
frain from future viola-
tions and to form a special
committee to "scrutinize"
transactions.

More recently, he got
entangled in the notorious
Guinness takeover of Dis-
tillers. Apparently con-
cerned that his Schenley
would lose its valuable
U.S. distribution rights
for Dewar's whisky, a Dis-
tillers brand, Riklis alleg-
edly agreed to help Guin-
ness pull off the takeover.
His purchase of more than
5% of Guinness helped
boost the stock price,
which in turn aided Guin-
ness because it was ac-
quiring Distillers with
Guinness shares. (Riklis
failed to report his 5%

stake to British authorities; his lawyers
subsequently called this an oversight.)
In exchange, according to testimony by
Guinness' former finance director, the
company granted Riklis an indefinite ex-
tension of his Dewar's distribution con-
tract and transferred to him the Dewar's
U.S. trademark for a small fee.

Although the deal might appear to
have been a quid pro quo for Riklis'
help, his lawyers maintain that the exis-
tence of a U.S. trademark holder gave
Dewar's more muscle in fighting unau-
thorized imports. In any case, Guinness'
top managers resigned after the scandal
came to light, and new executives
threatened Riklis with legal action over
Dewar's. In 1987, he washed his hands
of the matter by the sale of Schenley to
Guinness. Unlike eight top British execu-
tives and investors who face criminal
charges in connection with the scandal,
Riklis seems to have emerged un-

A CAREER OF WHEELING AND DEALING

1957 Through Rapid-American Corp., an office machine, printing, and Christmas-card company he controls, former stockbroker Meshulam Riklis starts buying merchandising, tire, apparel, and packaging compa-
nies, largely through high-yield debt and stock swaps

1963 Disastrous earnings at McCrory stores, acquired in 1960, force
Riklis to liquidate all Rapid holdings except 51% of McCrory

1974 Combination of poor management, a recession, and tight credit
again brings Rapid to the brink. Leads to sale of International Playtex and
BVD units; uses proceeds to retire debt

1978 SEC charges Rapid and other Riklis companies paid fees to Rik-
lis' personal creditors in 1975, when he was in financial difficulty. With-
out admitting or denying guilt, he agrees not to violate securities laws

1986 Fails to make required disclosure of more than 5% stake in Brit-
ain's Guinness PLC. Riklis calls it an oversight, but a former Guinness fi-
nance director testifies that Riklis helped bid up price of Guinness to as-
sist its acquisition of Distillers PLC

1988 Buys E-II Holdings from American Brands and removes \$925
million in cash. The move prompts suits by E-II bondholders claiming he
may have violated bond covenants. Riklis denies any wrongdoing

1989 A deal to sell most of E-II's Fabergé unit to Unilever fizzles. E-II
announces a plan to build a cosmetics and fragrance empire

DATA: BW

can private but left its debt in public
hands, the company's bond rating has
remained at a lowly CCC. Very few Wall
Street firms even follow his debt, large-
ly because his deals are so labyrinthine
and information about them is so sparse.

Typical is a transaction in May, 1986.
That month, he took Fabergé out of
Rapid and transferred it to Riklis Fam-
ily, leaving Rapid bondholders with a
new issue of preferred, nonvoting stock
in Fabergé. One effect was to lessen the
bondholders' influence over Fabergé. It

Riklis bought E-II Holdings,
then sold it Fabergé—
for twice what it was worth,
plaintiffs say

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People

scathed. He was interviewed by Scott Yard last November but hasn't been charged as a co-conspirator. Sources say British authorities are not likely to further explore his role in the takeover.

But the pressure from E-II bondholders is likely to increase. They allege that by swapping the \$925 million cash Fabergé, Riklis may have broken bond covenants intended to conserve cash flow for interest and debt payments. A suit by the bond's trustees, filed in winter in federal court in the Northern District of Illinois, charges Riklis with siphoning off additional E-II cash to loan money to Rapid and to pay off Fabergé loans. Riklis' lawyers contend that bond covenants were broken and that there was nothing wrong with taking cash out of E-II. The suits are pending.

MAKEUP ARTIST? Bondholders cheer Riklis' announcement that he was selling Fabergé to Unilever. "At that juncture," says Robert Miller, a lawyer for a bondholder plaintiff, "we said, 'You did the deal done, we drop our lawsuit.' It didn't work out that way. In May, a

The confusion among bondholders will likely grow as Riklis tries to become a major factor in cosmetic

days before the deal was to close, abruptly announced that it was off. Unilever claims Fabergé suddenly asked for a much higher price. Daniel J. Manahan, chairman of Fabergé and vice-chairman of E-II, says only that "lots of legal and technical problems" scuttled the deal.

Adding to the confusion is Riklis' decision to use E-II to buy Minnetonka. E-II, which is bidding against Unilever, among others, is thought by industry analysts to be the high bidder. But bidders' offers have been well below Minnetonka's current market value of \$1 billion, which is presumably what Street expects to be the result of a bidding. An announcement from Minnetonka is expected in June.

Riklis has typically grand ambitions for cosmetics. "We want to become a major factor in this field," says Manahan, his right-hand man for 30 years. But it may not be as easy as they think. E-II's total outstanding debt of roughly \$2 billion, investors won't leave Riklis alone until they are assured he can keep the cash flowing. This time, Riklis may not have all the time he wants.

By Andrea Rothman in New York, Mark Maremont in London

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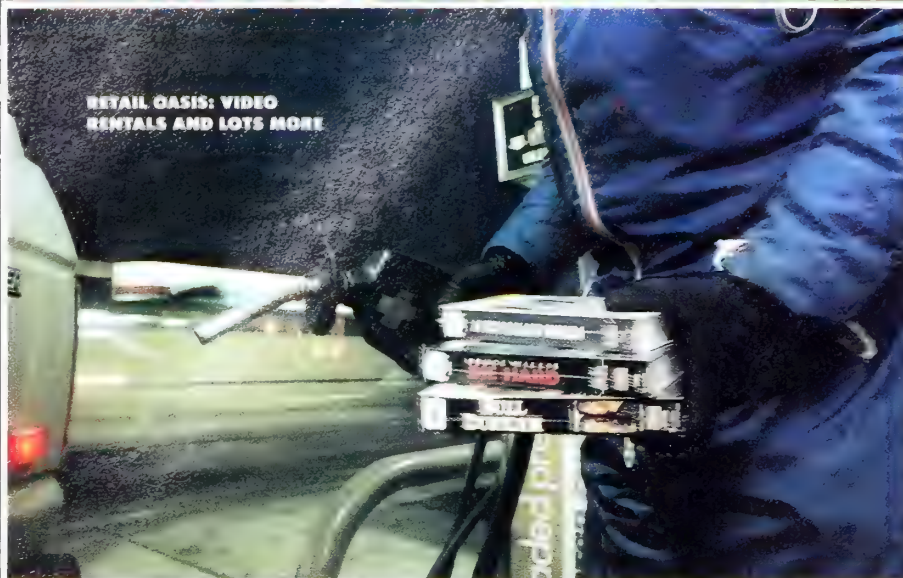
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GASOLINE

IT'S NOT JUST A FILL-UP ANYMORE—IT'S AN EVENT

The current marketing frenzy has gas stations all pumped up

When Emanuel "Manny" Gianakakos took over a Shell service station in Lincolnwood, Ill., nearly four years ago, it was pumping red ink. Gianakakos spruced up the place, started giving away cold drinks, key chains, and coffee mugs, and began running specials on tune-ups and oil changes. Then, last December, Shell Oil Co. refurbished his station with \$350,000 worth of flashy new canopies, signs, and high-speed pumps. The No. 1 U.S. gasoline marketer has also been pushing a series of new products in a national ad campaign. Today, Gianakakos can't pump fast enough: At 360,000 gallons a month, his sales are up sixfold from 1985. "People are coming back," he says.

So is gasoline marketing. Amoco, Exxon, Mobil, Chevron, and Shell are spending billions of dollars to jazz up their stations and push new grades of super-premium gas. And Gasoline Alley is starting to look like a shopping mall. At many of today's slick stations, you can pick up fresh doughnuts, pizza, and bread—and even rent a movie. You may be able to pay for your gas at a pump-side credit-card terminal. Or you may drive off with a free lottery ticket, a lot of trading stamps, or a chit for a moon ride, courtesy of your business-friend, local dealer. It's the sort of mar-

keting frenzy that hasn't been seen since the industry's heyday in the 1960s, when oil companies launched fancy-sounding fuels—remember Shell's Plat-formate?—and dealers gave away everything from dishes to inflatable dinosaurs to draw in drivers.

But if it seems like the go-go years for gas again, the industry is also feeling a chillier blast from the past. After the Exxon Valdez tanker spill off the Alaskan coast on Mar. 24, Big Oil has been wriggling under intense scrutiny the likes of which it hasn't felt since the energy crises of the 1970s. The average price of all retail gas has risen 19% since early March, to \$1.18 a gallon, according to Lundberg Survey Inc., an industry research firm. The industry blames the sharp rise in gas prices on OPEC, rising demand, and the cost of meeting new environmental rules. Still, suspicions of price gouging and worries about environmental damage have given the industry quite a black eye.

Oil companies would rather focus happier prospect: the start of the summer driving season. Increasingly, the industry is making its money at the pump rather than in the oil field. In 1988, refining and marketing profits for the top oil companies doubled to \$21.8 billion while production profits fell, according to a survey by *Oil & Gas Journal*, a trade publication.

'A REVOLUTION.' Sales should be strong again this summer. But demand for gas is rising at less than 2% a year, and heightens the battle for market share. To sharpen their retail operations, majors have closed down thousands of money-losing stations in the past few years, abandoning entire regions. They're spending heavily to upgrade refineries and stations, enabling them to pump more gas through fewer outlets. "It's a revolution at the station," says Bryan Jacoboski, an analyst at PaineWebber Inc.

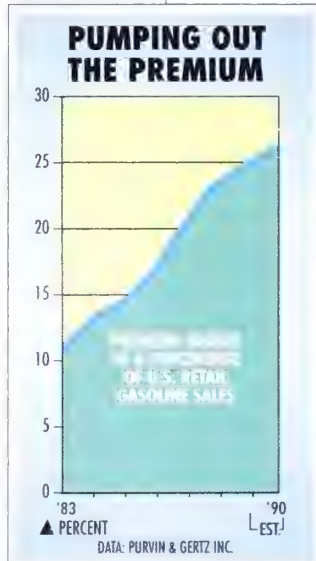
Amoco has been in the front rank of that revolution. Starting in the early 1980s, it has pulled out of 16 states, spent more than \$100 million to modernize its remaining 3,700 stations, and is pressuring its 6,700 independent owners to follow suit. In 1987, it became the first major oil company to start phasing out leaded gasoline, replacing it with two high-octane grades, Amoco Super and Ultimate, which it pushes with a million-a-year ad campaign. "We give the customer what he wants," says Robert J. Rauscher, marketing vice president. In the 29 states where it still

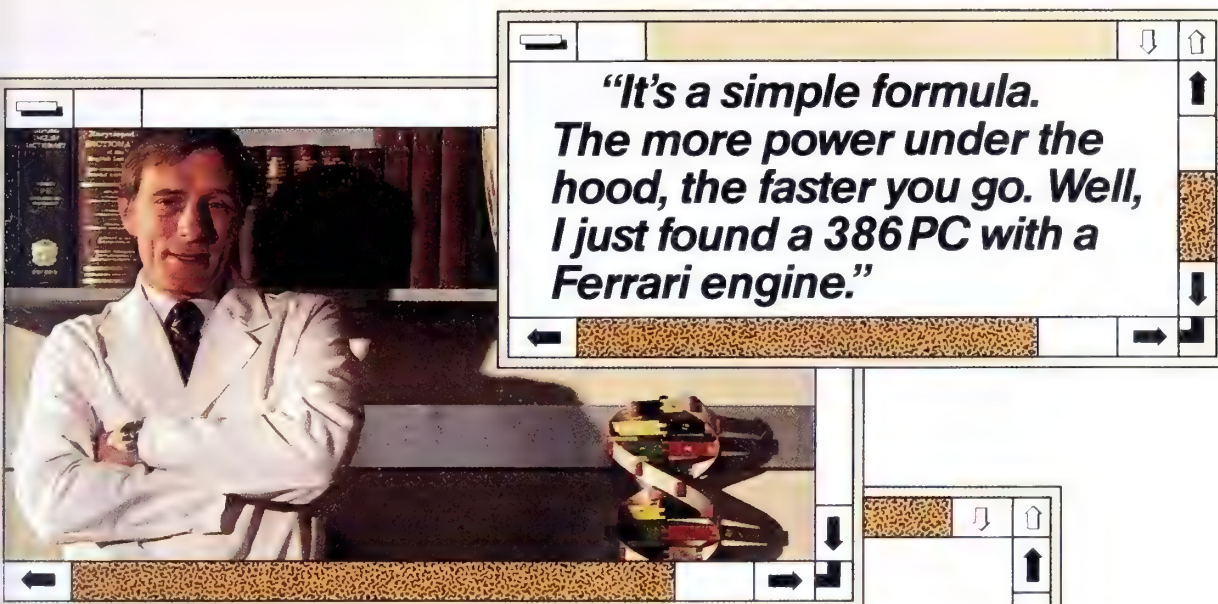
sells gas, Amoco has increased its market share to 12.5% in the last year from 11.8% in 1983. In 1988, it had operating profits of \$1.1 billion in refining and marketing on sales of \$1.1 billion—almost as much as it earned from production.

Like Amoco, many other companies are unveiling new products in the market for the \$85 billion U.S. gasoline market. Tapping America's renewed love for performance cars, they're hiking the octane ratings in their premium gasoline lines to as high as 100, tossing in additives

to help engines run smoother, and tooting it off with a fancy name. On March 1, Texaco announced a new line of Super 3 fuels—leaded and unleaded—supported by a \$20 million campaign.

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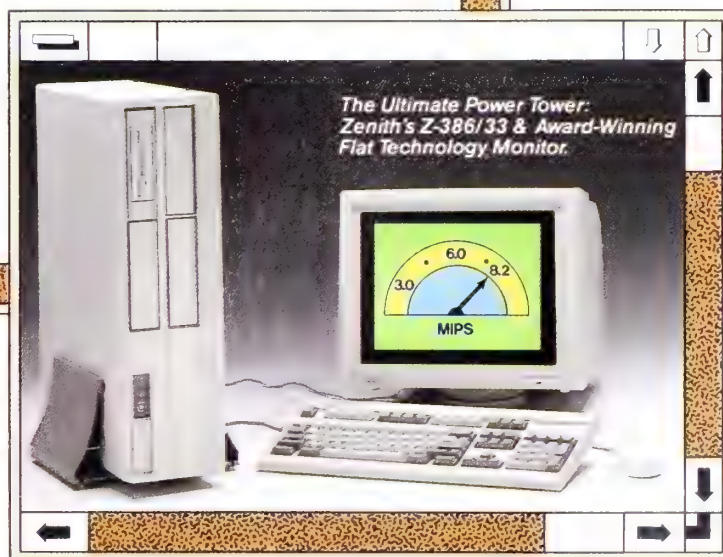
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Marketing

but ads often warn that lesser brands may cause engine damage. The tactic is working: Premium now accounts for 8% of the market, up from 12% in '81 (chart, page 90), according to Lundberg Survey. For oil companies, the octane race makes sense: Premium grades are only about 4¢ a gallon more to make than regular 87-octane gas, but they retail for as much as 15¢ a gallon more. And consumers will pay it. "Quality is the big motivation today," not price, says Gordon H. Thomson, vice-president of marketing at Exxon Co. U.S.A.

In case the gas alone isn't enough to draw, retailers have a host of other products for their customers. Ashland Oil Inc.'s Super-America stores sell fast-food doughnuts and sandwiches, and feature garden centers and cosmetic counters, as well as videotape rental. In several cities, Amoco is testing joint ventures with fast-food outlets, including Dairy Queen, Dunkin' Donuts, and Burger King. In addition, repair services have been making a small comeback. About 2,700 of Exxon's 3,700 stations perform repair jobs.

WHITE HATS. Some dealers are even going back to full service—way back. Bob Cromwell, a Chevron dealer in Northridge, Calif., replaced his staff's greasy uniforms with crisp white 1950s-style outfits, complete with matching white hats and black bow ties, and he greets the women's room with roses and a box of tissues. If an attendant fails to wash the windshield or check the tires, the driver gets a free fill-up. The result: Sales have jumped 29% since May, 1981, to 160,000 gallons a month. "You have to come up with new ideas to stay on top," says Cromwell.

Not every company is pulling into the full-service lane. In 1982, Atlantic Richfield Co. eliminated its credit cards, began carving out a niche as the cheapest supplier in the West. It doesn't sell super-high octane gas and it doesn't do repair work, though most of its 800 stations include 24-hour convenience stores. Last year, Arco's stations averaged 200,000 gallons a month, up from 180,000 in 1982, helping it jump from No. 10 to No. 1 in California. "We skipped a lot of nonsense because we knew we couldn't be everything," says George Babiarz, president of Arco Products Co.

Some critics say that the gimmicks are already wearing thin. If gas prices keep rising, motorists could be driven back to cheaper regular grades and to shop for low-price brands. But don't tell that to Gianakakos or the other retailers. They're too busy pumping profits.

By Mark Ivey in Houston, with L. Thermen in Chicago and Maria Shriver in San Francisco

PRODUCTIVITY

in

MEXICO

"THE LEAP TOWARDS TOTAL QUALITY"

by David Kimball

At first glance, the United States and Mexico seem to share the same chronic productivity problem. US productivity

growth has been frozen at about 1% in yearly gains since 1973, while Japan is often approached 6% annual increases during the same period.

Productivity growth in the US has remained sluggish despite massive expenditures in high technology equipment—\$19 billion was spent last year on automation in the US. Mexico seems mired in a similar productivity problem, with yearly gains estimated at about 1.3%, according to Julio A. Millán, President of the Productivity Commission for Mexico's National Confederation of Industrial Chambers.

But the similarity ends with superficial

comparisons. The key distinction begins with Mexico's immediate productivity potential as demonstrated by dramatic success in the country's manufacturing sector.

According to Felipe Cortés, President of the Productivity Council of Monterrey, manufacturing productivity has increased at nearly twice the average for the country as a whole.

From 1982 to 1988, the dollar value of non-oil exports doubled while oil exports dropped from 80% to 35% of the country's foreign income. "The rise in manufactured exports has

been nothing less than remarkable," says Dr. Fernando Sánchez Ugarte, Undersecretary of Industry

and Foreign Investment. While US productivity remains sluggish despite massive capital infusions, Mexican productivity appears to be extremely responsive to the new national priority of developing non-oil exports.





PRODUCTIVITY in MEXICO

"Maquila" Productivity

More important than any broad statistical measures are the results from specific sectors in which the basic requirements of productivity have been provided to Mexican operations. Certainly the country's booming maquiladora or assembly plant industry has become a productivity showcase. The industry's 25% yearly growth rate seems at first to rely primarily on a single productivity advantage – the low cost of labor. Mexican labor averages about 10% of the US equivalent, according to the US Department of Labor. Under the maquila program, US components enter Mexico for assembly and are then re-exported as finished goods. US duty is applied only to the "value added" in Mexico chiefly in the form of labor.

Mexican vs. Asian Costs

The enormous Mexico-US wage differential is complemented by Mexico's growing labor cost advantage over competing Asian countries. According to a report by the Wharton Econometric Forecasting Associates, South Korea (the low-cost leader among the industrialized Asian "Tigers") already has wage rates which are double the Mexican average in the maquila industry's largest manufacturing segment: electrical and electronic assembly.

But the most striking data from Wharton's October, 1988 analysis of the maquila industry are projections of dramatic increases in the wage gap between Asian and Mexican labor. Within five years, Korean wages for electrical and electronic workers

will be four times the Mexican average. Korean workers in transportation equipment will receive six times the wage for Mexican workers in the same field. Wages in Taiwan and Singapore will be even higher than in Korea, according to the Wharton forecasts.



Steel production, Hylsa Plant, Monterrey, Nuevo León

Beyond Cheap Labor

With such dramatic labor cost advantages boosting unit cost saving calculations in Mexico, the country's growing obsession with quality seems somewhat surprising. But there is "a very broad-based current" of new professional dedication to quality in Mexico, according to Dr. Enrique Alduncin Abitia, head of the Quality Division for Banco Nacional de México. In the bank's new quarterly journal, "Comercio Internacional Banamex," Alduncin reports on a survey of 230 "leader" companies in Mexico.

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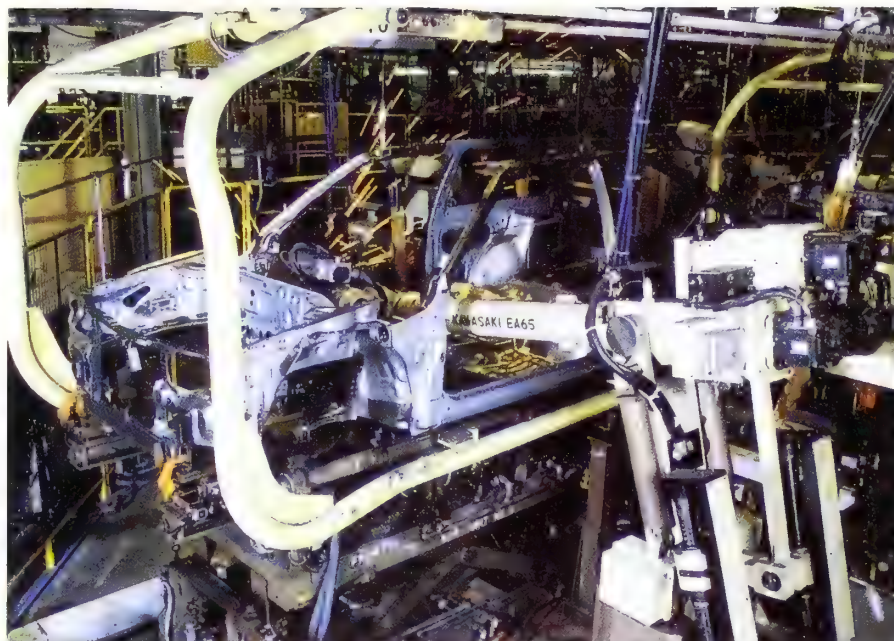


PRODUCTIVITY in MEXICO

which together account for about one-fourth of Mexico's Gross Domestic Product.

The Banamex survey recorded the companies' own product ratings and end projections for both quality and price. Alduncin concludes that "for the years 1988-90, in the large majority of manufacturing branches, increases in both quality and productivity will be evident, although the strongest orientation will be made in an effort to improve quality."

Based on the companies' estimates, the "leader company" products are currently not equal to world averages (a 1% quality advantage was estimated). But by 1989, the quality advantage will increase to 5%, followed in 1990 with an 8% international quality advantage,



Robotic welding, Ford Plant, Hermosillo, Sonora

MARKET ENTRY: MARKOVA

as measured by the companies' product ratings.

Alduncin explains that Mexico's new focus on quality reflects a "greater consciousness regarding the strategic role played by quality in world markets."

But he also notes that the new quality consciousness "is due in part to the fact that Mexico traditionally has competed almost exclusively on the basis of cost; in other words, inferior goods but at low prices."

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PRODUCTIVITY in MEXICO

Culture of Quality

Julio Gutiérrez agrees. Gutiérrez is president of the Mexican Foundation for Total Quality, and is also President of Conadumex, a major manufacturing conglomerate known for its quality products, strong exports and rising productivity.

"Many of (Mexico's) products compete only on the basis of price and that is principally due to a lower



MARKET ENTRY MARKOVA

assembly worker, Monterrey, Nuevo León

at cost than that of other economies. To compete only on the basis of price is highly risky. It is a very fragile and a very sad advantage."

Gutiérrez is a strong exponent of the Total Quality system adopted in Japan following World War II. He is largely in response to seminal work by W. Edwards Deming of MIT. It is a system which produced a worldwide change in attitude toward Japanese products in a single generation. This change in consumer perception of Japanese quality is now one of the hottest topics

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PRODUCTIVITY in MEXICO

discussed among Mexican management circles.

Julio A. Millán, President of the Productivity Commission for Mexico's Confederation of Industrial Chambers notes that "before, a Japanese product was a badly made copy of western products. Now, the consumer is willing to pay more for the inscription, 'Made in Japan.'"

Mexican manufacturers now clearly perceive quality as the entrée to international markets. There is a new recognition in Mexico that quality will produce the export sales which will in turn generate volumes equal to other world class producers. And these volumes will give Mexican operations the economies of scale required for international competition. Quality is seen as the key to further improvements in Mexican productivity.

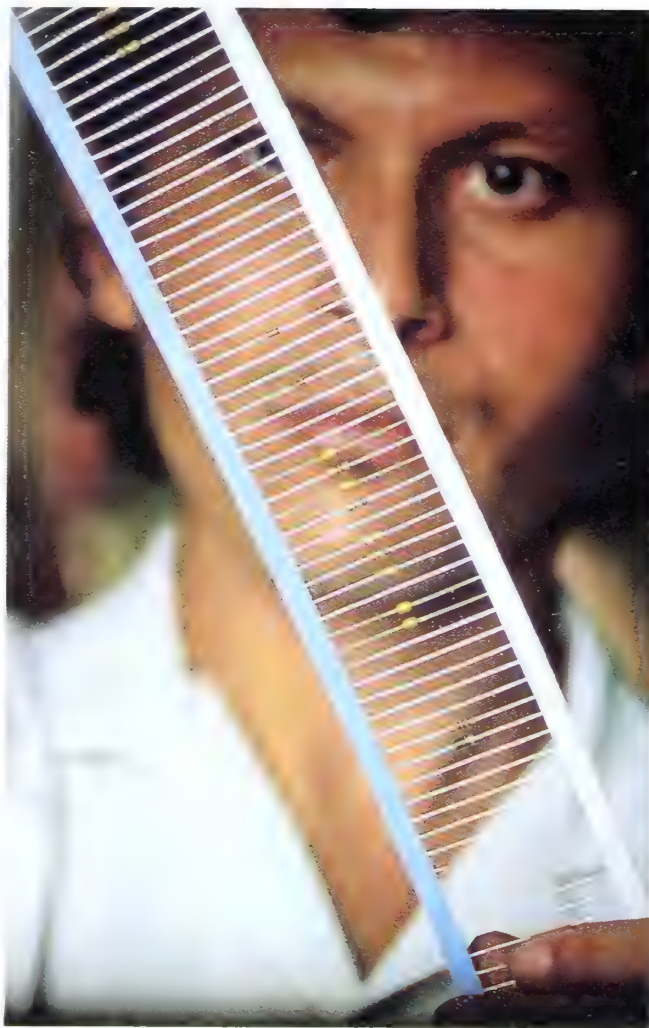
"La Apertura"

International competition is, in fact, the new reality of Mexico's internal dynamic. In 1985, Mexico began an abrupt series of tariff reductions which have opened its economy to foreign imports for the first time in more than 50 years. Quality and productivity are now perceived as the only means by which Mexican manufacturers can compete even within their own market.

"La Apertura (the opening) is an historic moment for Mexico," according to Gutiérrez. "We know we are going to lose some of our companies because they cannot survive against foreign competition. But those which can survive, will."

Gutiérrez believes "the lack of quality in some Mexican products is most often not a technical problem. It's an attitude problem—especially among management. We suffer from a negative attitude toward service. To some degree, there is a confusion in Mexico between 'service' and 'servitude.' And that confusion comes from our lack of democracy in the past."

But Gutiérrez remains optimistic.



Computer component production, Monterrey, Nuevo León

"The Mexican people have an enormous asset—youth. The new generation has a new attitude and a different history. They are more objective more unified and definitely better educated—although we still have much to improve in regard to education."

If quality is seen as the key to productivity, is Mexico now equal to the challenge of integrating world class, high tech operations into its developing economy? Is effective training pos-

sible in Mexico at a level which will allow competition in quality against established global manufacturers? And will the declining labor ingredient in many sophisticated industries ultimately destroy Mexico's competitive advantage?

The Ford Experiment

A highly sophisticated Ford engine plant was installed in Chihuahua in 1983.

"The circumstances were especially difficult in the Mexican plant since the technology was very advanced, the work force was inexperienced and the industrial infrastructure was not highly developed," according to a study of the plant published by the Center for US-Mexican Studies at the University of California, San Diego.

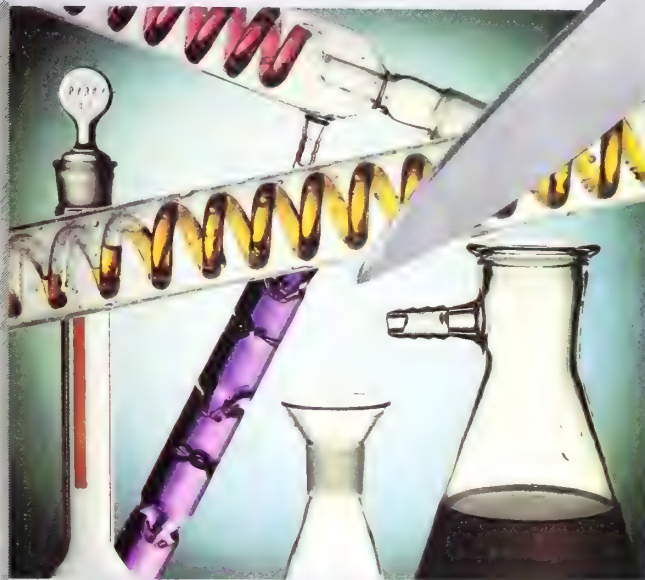
The labor content of the product is only 10%, well below a controversial benchmark for offshore manufacturing suggested by Peter Drucker in 1988 Wall Street Journal article. "If wage costs fall below 15% of total cost," Drucker said, "it takes a 50% wage differential—at the same labor productivity—to offset the costs of distance."

Fortunately for the Ford engine plant and for Mexico, the wage differential is 90%. And the productivity and quality of the Mexican plant approached that of two long established plants in the US and Canada within a brief two year start up period—despite the fact of inexperienced workers who had to perform at "the high

level of skill required to operate an automobile engine plant, particularly in maintaining and repairing the equipment," according to the UCSD study.

The UCSD analysis determined that the plant's overall performance "extremely impressive." The study concludes that the Mexican engine operation proves that "the resources to support high tech manufacturing are clearly available in Mexico." It also concludes that the wage differential is very

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CHUCK PETERSON, General Manager of Nortronics' (magnetic recording heads) maquila operation in Sonora, Mexico.

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KEN LILLEY, Manager of Xerox' Office Supplies Plant in Sonora, Mexico.

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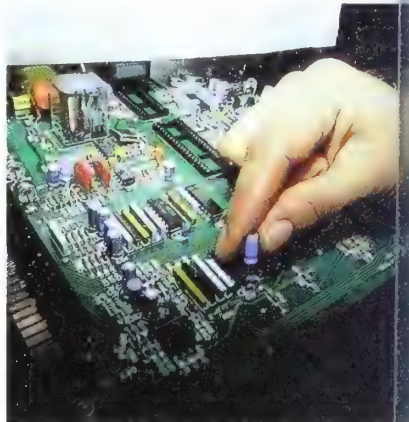


**PRODUCTIVITY
in
MEXICO**

significant even when labor amounts to only 10% of total manufacturing costs. Most important, the plant achieved "low unit costs—a combination of wages and productivity—and high quality..."

But is the Ford engine plant an exception in Mexico? In Monterrey, one of Mexico's premier manufacturing centers, at least one metalworking subcontractor combines low cost labor with state-of-the-art CAD/CAM production systems to serve clients around the world through satellite communication.

And in the maquila industry, Jose



Circuit board assembly, Cd. Juárez, Chihuahua.

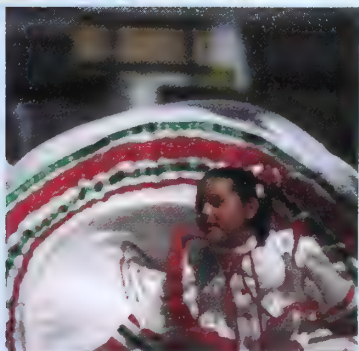
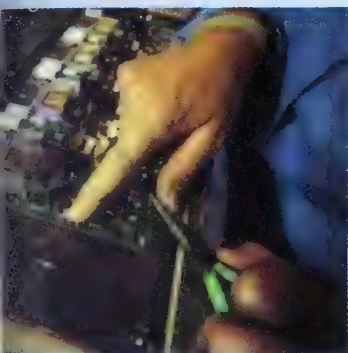
G. Micka, Director of Maquiladora Operations for Westinghouse states that he will "attest unequivocally that the productivity of the Mexican workforce, on the average, will be at least equal to but more likely, better than the average productivity one will find in US manufacturing operations."

Training: The Answer

The success of the Ford engine plant and other high tech operations possible only through intensive training. But training programs in other parts of the world have failed to produce such an abrupt rise in productivity and quality. Why has Mexico succeeded where other developing countries failed?

"The culture of Mexico is very adaptable to industrial culture," according to David Mayagoitia, Marketing

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PRODUCTIVITY in MEXICO

ice President for Frisa, a major industrial consulting and development firm with operations in Tijuana and Matamoros. "We don't know why young Mexicans don't adapt so quickly to industrial work—they can. In part, it's because there is a deep respect for strong leadership in Mexico. Also, Mexican workers are eager to learn because a job is a survival issue for them."

Training has become a much more important aspect of maquila assembly operations along the US border, according to Rudy Piña, Marketing Director of Collectron, a Nogales "shelter" operation which provides turnkey manufacturing services for US companies. "Eight years ago, maquila work was mainly machining part 'A' to part 'B.' But now we have companies in Nogales which hire new employees up to ten weeks of intensive training before they're even

allowed onto the production floor."

This new emphasis on training is confirmed by an April, 1989 article by Mario Carrillo-Huerta and Victor L. Urquidi appearing in the Journal of The Flagstaff Institute. The authors note that "...the vast majority of the maquiladora firms...undertake training activities for their personnel." The authors also note that the maquila training "is much higher than that provided in the national firms" elsewhere in Mexico.

The Circle of Productivity

While quality labor at huge cost savings give Mexico a clear edge, Mayagoitia points out that productivity requires a "complete circle" of advantages including proximity, freight, utilities, construction costs and communications systems. "Mexico can now complete that circle," he says.

Professor Robert B. South of the University of Cincinnati, a specialist in site location criteria, notes that "a shipment of electrical cables from Nogales, Arizona to Cincinnati, Ohio costs approximately \$1,200 with a delivery time of two to three days. The same shipment from Hong Kong to

the US West Coast is double this rate with in-transit time of about three weeks. In addition, freight cost and transit time must be added between West Coast ports and final destination."

The Future

In a pioneering study of maquila productivity, Professor Charles W. Lackey, Jr. of the University of Texas at El Paso identified "a trend toward more capital intensive process investment." Carrillo-Huerta and Urquidi cite a related trend, noting that "toys and apparel are losing importance and modern electrical conduction products and electrical equipment" are gaining.

This suggests that Mexico's production sharing industry will continue to evolve toward more sophisticated, highly technical operations with a remarkable ability to compete successfully in global markets. It also suggests that manufacturing productivity in Mexico will continue its sharp rise in what Julio Gutiérrez calls, "The leap towards Total Quality."

David Kimball is president of Market Entry, Inc., a Dallas based consulting firm specializing in US marketing programs for Mexican companies.

PROJECTED CHANGES

International Competitive Position of "Leader" Companies in Mexico.

(230 companies representing about 25% of the Gross Domestic Product)

SECTOR:	1988		1989		1990	
	Cost	Quality	Cost	Quality	Cost	Quality
Agriculture / Livestock	85.5	-20.0	88.5	-20.6	91.5	-12.0
Mining	75.0	0.0	60.0	0.0	67.5	0.0
Manufacturing	85.5	5.5	84.7	8.7	80.0	9.2
Foodstuffs	75.5	14.7	75.0	17.1	74.6	19.2
Textiles	97.5	-10.0	95.0	-2.0	76.5	-4.0
Printing & Publishing	92.4	-46.2	96.5	-36.3	92.4	-33.0
Chemicals	75.5	5.0	73.4	8.7	72.5	10.3
Non Metallic Minerals	75.0	0.0	75.0	0.0	75.0	0.0
Basic Metals	149.4	-13.2	132.0	-13.2	96.5	0.0
Metallic Products	85.9	8.6	86.0	9.5	79.7	9.9
Other Industries	69.1	-9.3	80.7	0.0	67.1	24.2
Construction	42.1	-12.1	37.1	-7.7	37.1	-6.6
Trade & Tourism	66.4	-4.0	63.0	0.6	62.2	4.3
Transport	77.6	-6.6	81.7	-6.6	81.7	-6.6
Financial Services	28.4	0.9	30.4	6.1	32.3	9.1
Commercial Services	22.9	-8.6	22.8	-8.6	25.4	-6.8

Index: 100 equals International Average in Cost and Quality.

Source: Survey, Banco Nacional de Mexico, December 1988.

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BIOGEN'S NEW MONEYMAKING GENES

After \$106 million in losses over 10 years, profits sprout

When James L. Vincent took over the top slot at Biogen Inc. in 1985, the biotech start-up seemed well on its way to becoming a biotech has-been. The company was sliding deeper into the red as its scientists pursued 15 diverse projects ranging from cancer drugs to nickel extraction.

But Vincent, 49, has put Biogen back into working order. In the few years since the company's founder and Nobel laureate Walter Gilbert abruptly resigned and the board lured Vincent away from Allied-Signal Inc.'s diagnostic business, he has slashed costs, focused research, and has now set his sights on turning the Cambridge (Mass.) company into an independent drugmaker.

Gone are Swiss and Belgian research laboratories and a Swiss production facility, at annual savings of \$12 million. That money is now fueling a streamlined research effort in AIDS, cancer, and arthritis. Topping the list is a hotly competitive experimental AIDS drug called CD4, which Vincent hopes will become the first product Biogen will market on its own. He has also deftly pushed existing products toward profitability.

NEW PROMISES. Overall, Biogen's revenues nearly doubled, to \$30 million, in 1988. Biogen has been profitable for three successive quarters, through March, 1989, after losing more than \$106 million in its first 10 years. Product royalties, \$18 million last year, should hit \$46 million in 1990, as Biogen's licensees, including Abbott Laboratories and Ortho Diagnostics, grab a bigger piece of the \$250 million diagnostic market.

Vincent has proved to be a savvy marketer. Take Biogen's hepatitis patent. The company split licensing of hepatitis B vaccines and diagnostic kits along several product lines—and found a licensee for each. That boosted royalties to \$7 million in 1988 from next to nothing the year before.

The outlook for alpha interferon is similar. Last year, Biogen licensee Schering-Plough Corp. racked up \$50 million in sales of alpha interferon for treating venereal warts and Kaposi's sarcoma. It may soon win Food & Drug Administration approval as a remedy for

other diseases as well. A recent study of colon cancer patients showed that alpha interferon, used in combination with chemotherapy, yielded a positive response. Alpha also looks promising for chronic non-A, non-B hepatitis, the most common form of the disease transmitted by blood transfusions. Approval for those uses could push sales of alpha interferon to \$350 million by 1992—churning out \$25 million in royalties for Biogen.



CEO VINCENT: A DEFT DRUG MARKETER

Biogen isn't Vincent's first high-tech challenge: After stints at Texas Instruments and Abbott Labs, he built the \$600 million diagnostic business at Allied-Signal. Vincent is very much the back-slapping coach to his management team. Defections, once rampant, now run below the industry average. He often stretches product development meetings for hours to press scientists for details.

So far, Vincent's record has won him kudos on Wall Street, where the stock has rocketed from 8 to a recent 15% in the past six months. But his next task is a little trickier. With CD4 as a treatment for AIDS, he is up against competition

from Genentech, SmithKline, and Upjohn—all with products in testing.

So far, the outlook for CD4 is not good. CD4 is a receptor on the surface of immune cells that seems to help the virus gain entry. The idea is to inject copies of the receptor into patients to soak up the virus before it can infect living cells. In early June, Genentech released results of an early test on humans that showed the drug had no toxic effects. But the patients didn't show any consistent decline in certain chemicals that indicate the amount of AIDS virus present. Even if all goes well, it will take at least two years for any version of the drug to win FDA approval.

The biggest obstacle to CD4, however, might be its cost. Kidder, Peabody & Co. estimates that manufacturing CD4 alone could run above \$20,000 per patient per year. Meanwhile, Genentech and Hoffmann-La Roche Inc. are ex-

BIOGEN'S BEST PROSPECTS

ALPHA INTERFERON Cancer drug licensed by Schering-Plough for treating Kaposi's sarcoma and venereal warts. Biogen holds 60% of \$130 million market. Expected to win approval for a variety of other cancers. Biogen's revenues may reach \$25 million by 1992.

HEPATITIS VACCINE Licenses for a hepatitis B vaccine and diagnostic kits to SmithKline, Abbott Labs, and Ortho Diagnostics racked up \$7 million in royalties for Biogen last year. The three licensees are expected to pick up a greater share of the \$400 million market.

CD4 Drug may inhibit the spread of the AIDS virus in infected patients. Being tested alone and in combination with other drugs. Genentech, Biogen, SmithKline, and Upjohn all racing to bring the new drug through clinical testing.

DATA: COMPANY REPORTS, PRUDENTIAL-BACHE SECURITIES

menting with modified CD4 molecule that last up to two weeks, compared with a day for CD4 alone, and that cost less to administer.

But Vincent is determined to be a contender in the CD4 race. The company is in the midst of a \$50 million preclinical stock offering that will boost its cash hoard to \$100 million and permit it to build production facilities and increase its marketing force. "Jim is determined to run his pharmaceutical company," says Skaletsky, Biogen's chief operating officer until March, 1988. But that's more on how CD4 fares in clinical testing than on Vincent's management style.

By Laura Jereski in Cambridge, Mass.



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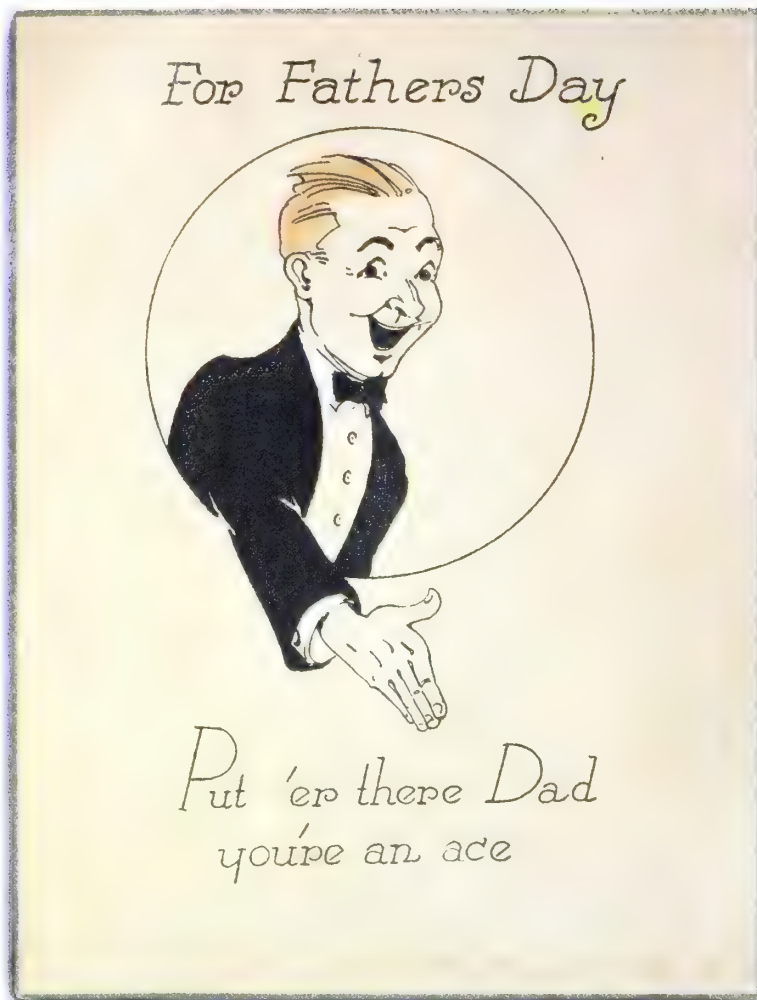
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SLICK WAY OF STOPPING THE FREIGHT CAR FROM HOPPING



Working on the railroad can be dangerous, even fatal, when a freight car's wheel bearings overheat. Railroads currently rely on trackside infrared sensors, spaced 20 to 30 miles apart, to spot overheating before it causes calamity.

derailments. But the technology is prone to false alarms. Now, researchers at Carnegie Mellon University in Pittsburgh have patented a new, on-board sensor. The device, which replaces one of the bearing's bolts, contains a heat-sensitive wax and an electronics module. When the bearing gets too hot, the wax melts, pushing an antenna through the hole of the bolt, and the module sends a radio warning to the engineer. The cost? "We're still at a preliminary phase," says William M. Kaufman, director of the Mellon Institute at CMU, "but it should be well under \$100." Unlike trackside sensors, these won't be fooled by hot wheels, dust, or grease.

STARTLING SUCCESS AGAINST AIDS WITH A TRAGIC ENDING

is not a proven cure for AIDS. And if it does work, the procedure will remain difficult, costly, and painful. But on June 6 at an international AIDS meeting, scientists from Johns Hopkins University announced that they had, for the first time, removed all discernible traces of the deadly virus from an infected human being. "We have to be very cautious because we only looked at one patient," says Hopkins oncologist Dr. Saral. "But we think it has potential."

The researchers destroyed the bone-marrow cells of the patient, who also had cancer, with radiation and chemotherapy, then replaced the cells with bone marrow donated by his brother. Other researchers had tried similar therapy without success, because the donor cells were quickly infected by the virus. So Hopkins gave the patient high doses of the antiviral drug AZT before and after the transplant. A month later, the patient's immune system was beginning to respond—and several tests failed to find evidence of the virus.

Unfortunately, the treatment proved less effective against the patient's cancer. He died of a tumor 46 days after the transplant. To see if the technique really works, Hopkins scientists will try again, first with AIDS victims who also have cancers that would be treated with bone-marrow transplants, then with others.

THIS GENETIC ENGINEERING'S COLD FUSION?

Through genetic engineering, scientists can create livestock that grow faster and larger than normal, lab animals that mimic human diseases such as AIDS, and cows or pigs that act like living drug factories. To create these "transgenic" animals, however, researchers must master a difficult

cult task—injecting new genes directly into fertilized eggs.

Now, scientists at the University of Rome claim that they have developed a far simpler technique. In the current issue of the journal *Cell*, they report that foreign genes can be transplanted simply by mixing them with sperm in a test tube. In a mechanism scientists don't yet understand, the sperm apparently capture the genes and carry them to the egg, where they become part of the embryonic animal.

Molecular biologists are reacting to the startling report with a mixture of hope and skepticism—just as physicists did to cold fusion. Already, a number of laboratories are rushing to duplicate the experiment. "By Christmas," says Ralph L. Brinster, a leading transgenics researcher at the University of Pennsylvania, "everyone will know if it works or not."

A TOUCH-UP JOB FOR CUT-UP FRUIT

You want to serve a fruit salad to your dinner guests, but if you make it ahead of time, the fruit will brown and shrivel. It may not be life's toughest conundrum, but it's a sticky problem for large institutions that serve thousands of meals a day.

So, scientists at the Agricultural Research Service lab in Albany, Calif., have developed an invisible, tasteless coating made of milk protein that keeps a slice of apple or a vegetable from decaying, drying out, or browning for up to three days. Over the next two years, they hope to extend the time to 15 days, making it possible to ship fresh-looking cut fruit across the country. They have also created a protective edible coating made of pectin, a plant protein. Because the shield is too thick to slip by the taste buds unnoticed, the scientists decided to add striking flavors. This resulted in exotic concoctions such as strawberry-coated bananas. "Who knows," says chemist Attila E. Pavlath, "it just might catch on."

HOW FAST IS FAST? TRY 22 BILLIONTHS OF A SECOND



As mainframe computers and microprocessors become faster, so must computer memories. In the race to build faster memory chips, IBM has made the world's speediest one-megabit dynamic memory chip or DRAM. The experimental chip, fabricated at IBM's manufacturing plant in Yasu, Japan, operates two to three times faster than current one-megabit chips. It retrieves a bit of information in a mere 22 billionths of a second.

The high-speed chip uses a new complementary metal oxide semiconductor (CMOS) process developed at IBM's Thomas J. Watson Research Center in Yorktown Heights, N. Y., and at the Yasu lab. CMOS technology also allows the chip to operate at lower power levels, thereby keeping the circuits cooler.

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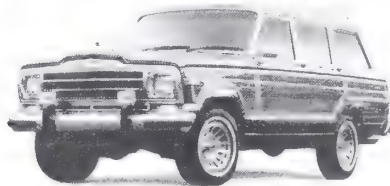
Cherokee Resale Value: Cherokee has a higher resale value than Ford Bronco II and Chevy S-10. Source: *Kelley Blue Book*, May/June 1989, analyzing resale value for 1985, '86, '87, and '88 model year vehicles.



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Comanche Resale Value: Comanche has a higher resale value than Ford Ranger, Chevy and Mazda pickups. Source: *Kelley Blue Book*, May/June 1989, analyzing resale value for 1987 and '88 model year vehicles.



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Wrangler Resale Value: Wrangler has a higher resale value than anything in its class. Source: *Kelley Blue Book*, May/June 1989, analyzing resale value for 1985, '86, '87, and '88 model year vehicles.

770

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DRIVING TO BECOME THE IBM OF GOLF

ClubCorp, the world's top club manager, is just teeing off

By the time he was 31, Robert H. Dedman had achieved more than most lawyers. Among his clients was oil baron H. L. Hunt. But working 80 hours a week for clients such as Hunt only fueled Dedman's desire to build his own empire. Convinced there was money to be made in golf, he took a gamble in 1957 on 400 acres on the outskirts of Dallas. He opened Brookhaven Country Club and aimed it at the middle class. But it was seven years before he felt his business, ClubCorp, showed enough promise to let him quit the law.

are just getting started," he says. Dedman, who comes from a modest background in Arkansas, recently was honored by the Horatio Alger Association of Distinguished Americans. He is nothing if not a workaholic. It's a wonder he finds time to play golf at all, but he plays about once a week, with a 17 or 18 handicap. Even though, with 53 country clubs, ClubCorp is the largest such manager in the U.S., it taps only a small slice of the \$20 billion-a-year golf market. Dedman hopes to expand in this market, taking the company far beyond

one of the largest savings and loans in Texas, in part because the thrift held some prize golf properties.

The elder Dedman foresees extraordinary growth for each of these businesses. He says the resort subsidiary could reach \$600 million in revenue by the mid-1990s, up from \$85 million in 1987. For ClubCorp as a whole, Dedman is predicting blistering growth at the rate of 30% a year. These predictions are being taken seriously. "I think 30% annual growth is achievable, at least for a few years," says John R. Crow, senior principal at Pannell Kerr Forster, an accounting firm that specializes in the hospitality industry.

One reason for the optimism is that golf is one of the nation's most profitable industries. Although ClubCorp has competitors in all its business segments, "there is no other company of this great size that does all of what it does," says Crow. And yet ClubCorp controls less than 2% of the private-club market and just 1% of the nation's public

FOUNDER DEDMAN AND SON BOB



In retrospect, Dedman's caution seems almost laughable. With 18,000 employees, 400,000 club members, and revenues expected to reach \$750 million this year, privately owned ClubCorp is now the world's largest manager of private clubs. It runs 200 worldwide, ranging from fashionable city dining clubs to its big growth area: golf clubs and resorts. "Its clubs are run exceptionally well," says Edward L. Hoffman, president of the Club Managers Association of America. That's high praise, coming from a group of association primarily for executives who manage independent clubs.

Dedman insists ClubCorp has only begun to realize its potential. "I believe we

its roots in private clubs. "We are now trying to cover the full gamut of the business, from the public course to the fanciest resort," claims Robert Dedman Jr., ClubCorp's president.

PRIZE PROPERTIES. In a rapid-fire series of moves, ClubCorp has acquired the nation's second-largest manager of public golf courses, increased its involvement in real estate developments surrounding its courses, set up an international operation that stretches from Kuala Lumpur to Munich, and begun adding golf resorts to its holdings. It bought the legendary Pinehurst Hotel & Country Club in North Carolina, for example, in 1984. And last fall, ClubCorp even acquired

CLUBCORP'S TOP COUNTRY CLUBS AND GOLF RESORTS

PINEHURST HOTEL & COUNTRY CLUB
PINEHURST, N. C.

FIRESTONE COUNTRY CLUB
AKRON

INVERRARY RESORT
FORT LAUDERDALE, FLA.

DEERWOOD GOLF CLUB
HOUSTON

BARTON CREEK CONFERENCE RESORT
AUSTIN, TEX.

SHANTY CREEK/SCHUSS MOUNTAIN
MANCELONA, MICH.

DATA: CLUB CORP. OF AMERICA

courses. Even in a no-growth environment, a company with ClubCorp's resources could easily pick up share in a market this fragmented. But golf is not immune (BW—Mar. 27). Its rapid growth is creating strong demand for new clubs and for skilled club management.

To reach his goals, Dedman must continue to prove ClubCorp can successfully manage its increasingly broad portfolio of businesses. Currently, its 180 public and private clubs account for about one-third of the company's revenues. Here, however, there is no single management formula.

At one end of the spectrum is the venerable Firestone Country Club

which ClubCorp bought in 1981. The stone was ailing, but Dedman resuscitated it by raising membership fees and recruiting membership primarily among executives of major corporations. At the opposite end is Brookhaven, which has grown to be one of the largest country clubs in the U.S., with 54 holes of golf, 5 swimming pools, 41 tennis courts, and 3,500 members who paid modest initiation fees. And then there are the elite downtown eating and drinking clubs that the company manages, such as Chicago's Metropolitan Club and Detroit's Renaissance Club, which don't even offer golf.

Growth at Dedman's domestic club subsidiary, Club Corp. of America, dried up when the bottom fell out of the company in Texas, which is the home of many of its properties. "But now we're getting calls almost every day from S&Ls and banks" looking for help with the loans on their books, says William Herndon, head of CCA's Southwest region. Picking up the best of the distressed loans, Robert H. Johnson, CCA's president, is aiming to add as many as a dozen clubs a year nationwide to

achieve a 25% annual revenue growth.

The real estate slump in the Southwest is also providing Dedman with an opportunity in resorts. He now owns four, including the Barton Creek Country Club, an Austin (Tex.) resort begun by former U.S. Treasury Secretary John Connally. Besides being clobbered by the S&L crisis, the value of many resorts was clipped by tax reform's tighter restrictions on passive real estate investments. "We are now seeing purchase prices as low as 20% of what they used to be," says John F. Meeske, president of Dedman's Club Resorts Inc. subsidiary. He hopes to have 40 to 50 resorts within five to seven years.

NEW MARKETS. Public golf may offer even more potential, since this is where the game is growing fastest. In 1986, ClubCorp acquired a majority interest in Silband Sports Corp., now the nation's second-largest manager of public courses, with 32. Silband, renamed Golf Corp., usually leases public courses and then brings in its own management to wring out greater profits.

Meanwhile, ClubCorp is rapidly becoming a force overseas. Since entering

Taiwan in 1982, the company has picked up 18 city and country clubs in Asia, Australia, and Europe. Now, Richard S. Poole, head of international expansion, expects to add six or so new golf clubs each year, while moving into such new territories as Mexico, the Mideast, and even the Soviet Union. But no foreign market is more promising than West Germany, where ClubCorp has formed a joint venture with Deutsche Bank. ClubCorp already has three German clubs in operation, and six more are under way. Poole predicts that in the future, foreign business might well represent as much as a third of ClubCorp sales, up from less than 10% now.

ClubCorp may well slip in its efforts to reach some of these targets. Even so, the company's future is so bright that one wonders what Hunt would have said if young Dedman had bet him that someday his golf business would look better than the oil business. These days, more than a few oilmen would be happy to trade places with the chairman of ClubCorp, whose net worth is estimated at more than \$500 million.

By William C. Symonds in Dallas

HELPING CLUBS IMPROVE THEIR GRIP ON BUSINESS

In theory, the country club is an oasis from the pressures of the business world. Unfortunately, many clubs are run as if their owners know little about business. Management problems are legion. Most clubs do not exercise economies of scale in purchasing. Staff turnover can be 200% a year or more. No wonder many clubs set monthly minimums for food—whether members use the club or not. Some clubs must even assess members to cover losses.

ClubCorp has become the industry's top manager of country clubs by proving that they can be run like businesses. While most clubs are nonprofit, ClubCorp charges for a return on revenues of 10%. "Yet we also promise we will save the clubs more than we cost them," says Robert H. Johnson, president of the company's U.S. club subsidiary, ClubCorp of America. CCA typically charges \$80,000 to \$100,000 a year in incentive fees. However, it typically saves clubs enough to plow 10% of their revenues back into improvements. And it prohibits minimums and assessments.

CCA's first order of business at a new club is to slash costs. It saves up to 10% on supplies by making the club part of its bulk-buying operation,

which purchases everything from fertilizer to glassware. Then it attacks labor costs—a club's largest expense—by implementing efficiency techniques it has developed over 32 years. It knows, for example, exactly how many worker-hours are needed to prepare and serve a given number of meals. Every club must monitor its financial progress with a weekly profit-and-loss



PINEHURST HOTEL: BACK IN THE BLACK

statement, enabling managers to spot problems more quickly.

But CCA's success is mostly due to the attention it lavishes on its employees and members. CCA's size enables it to tell a cook starting at \$4 an hour, for instance, that he or she could become a top chef at one of the company's largest operations, whether it is a country club, resort, or city club. This

has helped slash turnover to less than half the industry norm. In its effort to make members feel like royalty, the company requires, for one thing, that a member be addressed by name at least four times during a meal, including by the busboy, to show that the member is recognized. And workers can receive bonus points leading to paid days off when they go beyond the call of duty.

CCA's methods don't always work. "We once thought we were bulletproof," says Johnson, "but we found the market has to be there." A few years ago, CCA had to turn a city club in Muskegon, Mich., back over to the members when CCA's tactics fizzled. The techniques work often enough, however. And the experience is beginning to pay additional dividends. When ClubCorp bought its first resort, Pinehurst Hotel & Country Club in North Carolina in 1984, it used many of the lessons learned from country club management and sank \$16 million into upgrading the resort. Pinehurst, which was losing \$1 million a year at the time, produced an operating profit of \$10 million last year. Robert H. Dedman, ClubCorp's founder and chairman, now plans to add 20 to 30 more resorts in the next five to seven years.

By William C. Symonds in Dallas

“How can we expect
our people to connect if
our computers can’t?”





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Entrepreneurs

A MOTHER LODE OF LOANS FOR SMALL BUSINESSES

They say the first million is always the hardest to make. It can also be the hardest to borrow, as many a small-business owner knows. Happily, two relatively obscure programs offered through the Small Business Administration can provide financial aid. One plan is geared specifically toward entrepreneurs who want to expand. For the other, all you need is a brainstorm.

For the small business with a big idea, there's the Small Business Innovation Research (SBIR) program. Each year, 11 federal agencies set aside a percentage of their budgets to finance research and development projects at companies with fewer than 500 employees. "Universities, large corporations, and nonprofits need not apply," says Ed Shure, a director at the SBA's

Office of Innovation, Research & Technology.

Money is awarded in two steps. First, companies apply for Phase I awards of up to \$50,000 to develop a feasibility study within six months. Then they can apply for a Phase II award of as much as \$500,000, intended to finance two years of product development. In 1988, its fifth year of existence, the SBIR awarded an estimated \$350 million. But there is a screening process: In fiscal 1987, 15% of all proposals received Phase I awards. Only 32% of these made it into Phase II.

PUBLIC EYE. If a marketable prototype results from Phase II research, a company has two years to obtain a patent. The award-granting agency receives a royalty-free license to use the product.

The project must tie into

one of about 1,500 desired "topics" established by the agencies. Some are geared to a specific mission—NASA has sought gadgetry for its shuttles, and the Agriculture Dept. is always looking for ways to combat crop blights. Most topics are mundane industrial stuff, though some do get into the public eye: The National Science Foundation funded a high-pressure, water-jet drill, which came along in time to rescue little Jessica McClure from a Texas well last year. For a list of topics, write SBIR Pre-Solicitation Announcements, SBA, 1441 L St. N.W., Washington, D.C. 20416.

A product doesn't have to be highly sophisticated. Armando Cuervo was an international manager for Ashland Oil in Worthington, Ohio, when his baby son developed

colic. With the help of \$480,000 in SBIR aid, Cuervo invented SleepTone, a sound and vibration machine. When attached to a car seat, it simulates a car ride—helping Cuervo's son to sleep. The unit is marketed by Abbott Laboratories, and Cuervo has left Abbott to develop other inventions. He is now president of Sweet Inc. The experience "made me a full-fledged entrepreneur," he says.

For those who already have a full-time job, there's the SBA 504 loan program, which provides up to \$500,000 to keep a business going. This three-year-old program differs from the usual SBA approach, which guarantees a bank loan for an applicant who has been refused financing. Here, the owner must put up 10%, the bank lends 50%, and the SBA provides the

SA lends the other 40%.
qualify, the business must
a net profit of less than
million a year and must
one new job for every
0 from the SBA.

SBA funds come
gh a certified develop-
company, a local non-
investment group that
ges the loan as a bond
ells it on the public mar-
ans range from \$50,000
50,000, with interest
pegged to Treasuries.
d a CDC, call the Nation-
ociation of Development
NADCO): 202 785-8484.

BACKS. Although the
uarantees only its por-
of the loan, its presence
is an incentive for a
to do business with a
ny it ordinarily might
And the agency defi-
encourages the banks
and the loan for longer
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says Roslyn Gold-
; who heads Long Is-
Development Corp., a
ork area CDC. Most 504
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program has its draw-
The 504 loans carry
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d processing fees that
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ar, which declines dur-
loan's lifetime.

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riticized for making bad
But CDC screening pro-
are often stringent:
out of every 80 appli-
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ult time qualifying—
they're doctors open-
clinic in a depressed
Although startups are
the typical 504 com-
three to seven years
s Kathy Grimes, exec-
rector of NADCO. This
n is geared for "a go-
icern that's ready to
o the next stage of
ment." Troy Segal

Theater

BROADWAY'S BRIGHTEST LIGHTS

Broadway fielded a re-
cord low number of new
productions—30—this
year, but five proved worthy
enough to brighten a future
visit to Manhattan. And you'll
also want to check out a cou-
ple of fresh and innovative
Off Broadway shows as well.

*Jerome Robbins' Broad-
way* is the season's only new
sellout musical. It's great en-
tertainment, even though the
show's components aren't
new at all. You get full-scale
reproductions of 15 numbers
Robbins choreographed for
past successes. Includ-
ed: showstoppers from
On the Town, *West
Side Story*, *Gypsy*, and
Fiddler on the Roof.

Far less lavish but
every bit as enjoyable,
Largely New York is
fast-moving, humorous,
and unique. Great for
kids and adults alike,
the "wordless play"
stars comedian-dancer
Bill Irwin. He's as baff-
led as most by present-
day technology, pseudo-
intellectuals, and break
dancers.

In another unconven-
tional play, *Shirley Valen-
tine*, English actress Pauline
Collins is alone on stage for
two hours as a bored house-
wife. But her skillful imper-
sonations make you fully en-
vision her dull husband,
precocious child, and a seduc-
tive Greek bartender.

Two other plays boast full
casts, as well as a full comple-
ment of laughs. *The Heidi
Chronicles* warmly capsulizes
the waxing and waning of the
feminist movement over 20
years. And the very funny
Lend Me a Tenor is a stylish
farce with mixed identities
and multiple confusions.

Off Broadway, a dramatic
comedy, *Other People's
Money*, portrays a corpor-
ate raider—sort of an
Icahn icon. When he goes af-

ter a stagnant New
England wire company, he
confronts an attractive Mor-
gan Stanley lawyer—and
teaches her how deviously the
takeover game is played. Im-
pressively, the playwright
presents a sound case for



LEND ME A TENOR: A FARCE OF MIXED IDENTITIES

both sides. The owner fights
for his company, while the
modern gunslinger, "like Rob-
in Hood, takes from the rich
and gives to the middle
class—well, the upper middle-
class." (To charge seats to
these shows, call 800 233-3123
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young couple in the receiving
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ie's," a tacky restaur-
ant, for the reception.

During three hours
of toasts, fistfights, and
an odd male-bonding rit-
ual called slam-dancing,
you dine (free ziti, salad,
cheap champagne)
and take to the dance
floor. Meanwhile, you
become a confidante of
a pregnant bridesmaid,
mob-connected best
man, the bride's fa-
ther's sexy girlfriend,
and other members of
the merged Nunzio and
Vitale families. By the
time the newlyweds kiss and
make up after a cake-tossing
brawl, you'll be as exhilarated
and exhausted as the cast.
(212 279-4200; request a table
by the dance floor for most of
the action.) Don Dunn

Smart Money

MUNIS ARE EVOLVING INTO MORE DANGEROUS ANIMALS

Municipal bonds have traditionally been considered relatively risk-free: You bought them, enjoyed tax-exempt accumulated interest, and redeemed them at maturity.

But munis may be evolving into more dangerous animals. Municipal defaults for the first quarter of 1989 totaled \$175.8 million, up from \$109.9 million for the same period last year. Most of the defaults are in a few states. In Florida alone, 10 issues have defaulted since 1988, for a total of \$140.3 million. Illinois was second with 18 issues for a total of \$80.6 million, with Minnesota, Pennsylvania, and Tennessee following close behind.

Since 1983, there have been more than 500 municipal

defaults. Municipalities are spending. Some have resorted to creative, sometimes speculative investments to generate revenue without raising taxes.

Jacksonville Beach, Fla., is a case in point. The city lost \$1 million this year after trading in extremely volatile zero coupon bonds, says Kathleen Quail, a rating specialist at Standard & Poor's. Although Jacksonville Beach and other municipalities ultimately made good on their interest payments, their temporarily tenuous financial positions have made more than a few investors nervous.

The investors holding St. Cloud (Minn.) bonds haven't been so lucky. In 1983, St. Cloud issued \$3.2 million worth of municipal revenue bonds to build wood-fired heating systems at St. Cloud State University. The city hoped to offset the then-high cost of heating by natural gas at the campus and intended to pay off the bonds with the money they would save using wood for fuel.

LOWER YIELDS. But problems arose when a similar system at nearby Bemidji State University started to cause air pollution problems. The St. Cloud project was cancelled, and the bonds were declared in default. Although the courts awarded \$1.5 million in back payments to First Trust, the bondholders' trustee, the Minnesota legislature is in litigation with bondholders over who is responsible. So far, no money has been repaid to investors.

One way to counter the risk of default is to buy insured munis. If these default, the insurer continues paying interest on the bonds and redeems them at maturity. But like other investments that promise reduced risk, insured bonds have lower yields.

Laura Zinn

One way to counter the risk of default is to buy insured bonds

defaults totaling roughly \$3.6 billion, according to the Bond Investors Assn., a Miami-based nonprofit group that represents bondholders. And that doesn't include the \$2.25 billion Washington Public Power Supply System muni bond default in 1983, the largest in history.

Some experts trace the growing number of defaults to the federal government's reduction in funding to state and local governments—and to the municipalities' increased financial needs. This year, federal aid to state and local governments is \$123 billion, says John Peterson, senior director of the Government Finance Officers Assn. in Washington. That's up 34% from 1980 but represents only 18% of what the



Stereo

YOU GET QUITE AN EARFUL WITH THESE NEW HEADPHONES

Now that your stereo's sound is pure perfection, donning headphones might seem almost sacrilegious. But today's top-of-the-line models are a far cry from the awkward, heavy sets that used to damage the sound, not to mention your ears. Advances in design and technology have spawned headphones that are more comfortable and faithful to the music. The prices, though, can be ear-popping: Some cost more than your loudspeakers.

Audio cognoscenti rave about the headphones made by Stax Kogyo, a Japanese company that eschews the term "headphones" in favor of "earspeakers." A trifle grandiose, perhaps, but justified, since the headphones connect to your stereo like speakers. With Stax's SR-Lambda Signature headphones (\$2,000), instead of plugging the phones into the jack on the front of your receiver, you plug them into their own mini-amp that provides the necessary high voltage. The mini-amp connects to the speaker outputs on the back of your amp.

Stax's premier phones are "electrostatic," widely accepted as the superior technology in headphones. Their flat "planar" diaphragm, one-millionth of a meter thick, is coated

with conductive material suspended between two plates. When voltage is applied, the film fluctuates to produce sound. Electrostatics respond faster to signals than do heavier paper or plastic cone diaphragms in conventional electrodynamic phones. **AIRWAVES.** Another innovation, the cordless headphones work with an infrared transmitter. Usually not as good as similarly priced electrodynamic models, they do have advantages. Ivan Berger, technical editor of *Audio*, uses his set to watch TV in bed; there are no cords to trip over in the morning. Beyerdynamic's IRS 690 (\$400) is one of the top cordless models.

You may not have to run to the bank to get good sound. Larry Archibald, publisher of *Stereophile*, a high-end audio journal, notes that Stax makes quality phones for under \$200. Brands that he likes include AKG, Acom, Fostex, Koss, and Sennheiser.

And then there's Sennheiser's "ultimate headphone," the MDR-R10 for \$4,000, sold by order only. Made with "rare, 200-year-old" Japanese hardwood called Zelkova, the ear cushions of Greek key patterned leather, the phones even come with their own plush carrying case. Bodyguards are included. Suzanne Wright

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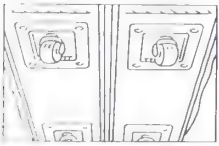
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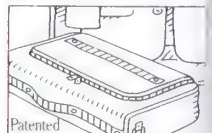


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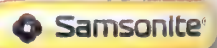
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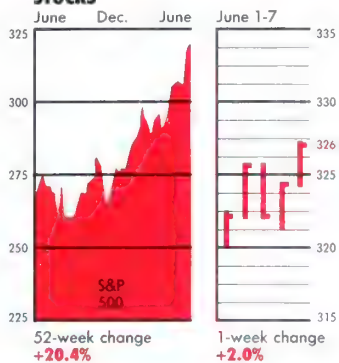
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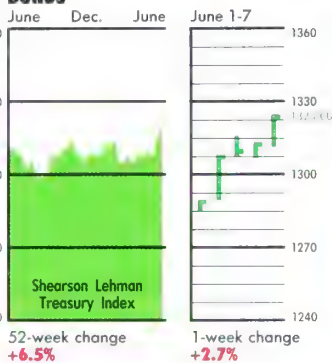
MARKET COMMENTARY

Market took an ominous turn on June 5, as concern about interest in China, combined with program trading, sent the Jones industrial average down 37 points. But in a couple of days the equity markets regained their composure. One positive factor was takeover speculation, spurred by tender offer for Time Inc. and LIN Broadcasting that sent communication stocks soaring. Gold, after months of decline, rose sharply in reaction to the China troubles.

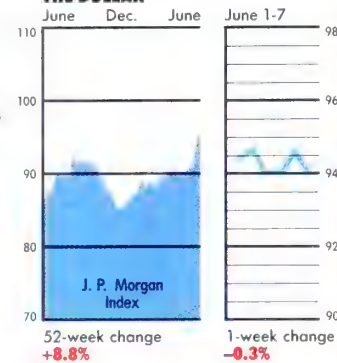
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	2512.5	1.3	19.5
COMPANIES (Russell 1000)	173.3	2.0	20.7
COMPANIES (Russell 2000)	173.0	0.8	18.7
COMPANIES (Russell 3000)	186.0	1.9	20.5

STOCKS

	Latest	% change Week	% change 52-week
ON (FINANCIAL TIMES 100)	2117.9	0.2	15.8
O (NIKKEI INDEX)	33,626.9	-1.9	20.5
INTO (TSE COMPOSITE)	3785.7	2.1	12.4

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.4%	8.9%	6.6%
30-YEAR TREASURY BOND YIELD	8.3%	8.6%	9.0%
S&P 500 DIVIDEND YIELD	3.3%	3.3%	3.6%
S&P 500 PRICE/EARNINGS RATIO	12.8	12.5	14.5

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	296.1	294.2	Positive
Stocks above 26-week moving average	70.6%	68.6%	Neutral
Speculative sentiment: Put/call ratio	0.21	0.22	Negative
Insider sentiment: Vickers sell/buy ratio	1.64	1.66	Positive

INDUSTRY GROUPS

4-WEEK LEADERS

	% change 4-week	% change 52-week
REBUILDING	21.8	67.7
RELS AND MOTELS	19.1	40.2
ENGINEERING AND CONSTRUCTION	15.1	45.4
CONDUCTORS	14.1	28.7
	13.6	-0.7

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
CHINE TOOLS	-0.7	-8.4
ALTH CARE SERVICES	-0.7	-10.4
ALS	-0.3	10.5
ESTATE INVESTMENT TRUSTS	-0.2	-7.5
AL AND GLASS CONTAINERS	1.0	15.9

Strongest stock in group

	% change 4-week	% change 52-week	Price
KAUFMAN & BROAD	40.4	78.2	17 ³ / ₈
HILTON HOTELS	34.3	85.5	84 ⁵ / ₈
HASBRO	21.3	41.3	21 ³ / ₈
FLUOR	16.5	57.4	29 ¹ / ₈
MOTOROLA	21.9	17.5	57

Weakest stock in group

	% change 4-week	% change 52-week	Price
BROWN & SHARPE	-17.1	-22.7	12 ³ / ₄
GENENTECH	-3.8	-30.4	18 ⁷ / ₈
ASARCO	-3.4	9.8	28
BRE PROPERTIES	-2.9	-2.5	29 ³ / ₈
BALL	2.3	-26.4	28 ¹ / ₄

BRIDGE INFORMATION SYSTEMS INC.

MUTUAL FUNDS

LEADERS

	%
ADMAN OCEANOGRAPHIC TECHNOLOGY	16.1
ADMAN ASSOCIATED	12.1
US TWENTY	10.4

LAGGARDS

	%
IFMANN	66.7
AWARE GROUP TREND	49.3
ADENA GROWTH	48.9

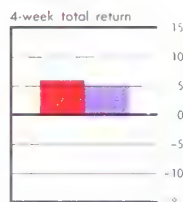
LEADERS

	%
FINANCIAL STRATEGIC PACIFIC BASIN	-7.1
JOHN HANCOCK WORLD PACIFIC BASIN	-6.4
STRATEGIC INVESTMENTS	-5.6

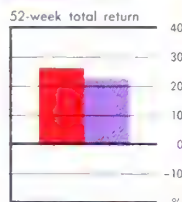
LAGGARDS

	%
STRATEGIC INVESTMENTS	-28.5
FINANCIAL STRATEGIC GOLD	-25.5
STRATEGIC GOLD/MINERALS	-25.2

LEADERS



LAGGARDS

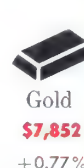


MORNINGSTAR INC.

RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio

Figures indicate percentage total returns



DATA RESOURCES INC.

Figures on this page are as of market close Wednesday, June 7, 1989, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close

June 6. Mutual fund returns are as of June 2. Relative portfolios are valued as of June 6. A more detailed explanation of this page is available on request.

DON'T CUT OFF CHINA OUT OF ANGER

The complexities of China have always confounded America. The intricacies were bad enough when there were two clearly defined parties vying for power in the 1930s and 1940s. The Americans sided with Chiang Kai-shek and his Kuomintang Party and shunned Mao Zedong's Communist Party. The failure to maintain relations with both sides cost the U. S. dearly, in China as well as Korea and Vietnam.

Now, China is entering a period of fluidity of the sort at which the Chinese seem to excel. The Communist Party appears to have fractured. Some military units affiliated with Deng Xiaoping and other hardliners are attempting to seize power in Beijing. Other military units—and an apparent majority of Chinese—don't like what is happening and seem sure to resist, whether violently or nonviolently.

Suddenly the U. S. government and corporate world must contend with an Old China in Beijing, a struggling entrepreneurial New China in coastal areas, a Hong Kong that is losing confidence, and a prosperous Taiwan regarding all these events from across the Taiwan Straits.

The immediate temptation following the appalling bloodshed in the streets of China is to pull out of the mainland altogether. But the lesson of history is that the U. S. should remain engaged, as fully as possible while being careful, with all the struggling factions and cliques. That will require real agility in Washington. President Bush so far is demonstrating that he understands some of the historical lessons. And U. S. companies should recognize that there will still be opportunities throughout China.

The last time China plunged into such a contest, it lasted for two decades, from roughly 1927 to 1949. The Cultural Revolution lasted a full decade. Long-term players maintained presences where prudent and profitable. Even if the octogenarian hardliners in Beijing prevail in the short term, the chances are strong that their days are numbered. They lack the mandate to rule. Much of the younger generation opposes their brutal Maoist tactics. We should not alienate these young, educated Chinese. It would be foolish for America to sever its ties with broader-based forces elsewhere in the country that desire continued progress down the road toward economic and political reform.

KICK INFLATION—EVEN WHEN IT'S DOWN

Very good, Mr. Greenspan! The Federal Reserve has made money easier by cutting the interest rate for federal funds by one-quarter of one percent, to 9.5%. That's not much, but it's enough to show the markets that the Fed knows the economy has slowed and the threat of inflation has receded. But inflation remains a danger, and Fed Chairman Alan Greenspan's job right now is to make

sure it stays bottled up. Policy, which has been tight to this point, should continue to err on the side of restraint.

The May employment report showed that the number of jobs is growing only about half as fast as earlier in the year. But wage growth in services—where three of every four working Americans are now employed—remains rapid. Productivity growth in services has been dismal, so unit labor costs among service producers are skyrocketing. Those cost pressures put a floor under inflation in the service sector, as service companies try to maintain their profit margins. So, despite lower inflation on the goods side of the economy, services make overall inflation a sticky problem.

The slowdown in employment growth is not an ominous sign of recession. The government's leading index rose strongly in April. Inventory growth is not excessive. Business plans for capital investment remain firm. Although consumer spending is slowing down, robust demand for U. S. exports is propping up growth in the manufacturing sector. And slower consumer spending means that imports are on the verge of a significant slowdown, so the trade deficit will continue to support economic growth as well.

Given the mix of slower, but healthy, economic growth and continued rapid wage growth in services, the Fed should continue to act cautiously. The latest easing move has given markets around the world the right signal. It's always possible that further easing may be warranted in the coming months, but only against a background of continued progress against inflation.

BUSTING THE IDEOLOGUES' MONOPOLY AT ANTITRUST

For the past two decades, the antitrust pendulum has swung wildly. In the 1970s, both Republican and Democratic trustbusters had few qualms about trying to break up business combinations that produced almost tripling in market concentration. In the 1980s, Reagan Administration officials—mostly academic devotees of the laissez-faire University of Chicago school of economics—diverged sharply from that approach. They attacked big acquisitions, arguing that big was not necessarily bad and that even concentrated industries can be highly competitive.

Now antitrust enforcement is poised for another turn. President Bush has nominated James F. Rill to head the Justice Dept.'s Antitrust Div. (page 64). If, as expected, the Senate confirms him after his June 15 hearing, Rill is likely to swing the pendulum back to the middle. He brings to the job a traditional Republican, hard-headed approach to enforcement, forged by 30 years in the trenches as an antitrust litigator. But he recognizes that some of the Chicago school's principles are sound. He believes, according to associates, that some industries today are truly global, so domestic concentration isn't as alarming as it once was.

Attorneys expect him to bring more challenges to mergers and to enforce parts of the antitrust laws that the Reaganites ignored. Rill can now bring a halt to the excesses of the past two decades. He would perform a real service by firmly putting antitrust enforcement on the proper course.

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Documentation (75)		Poor	Poor	Satisfactory	Very Good	Excellent	Excellent	Excellent	Very Good
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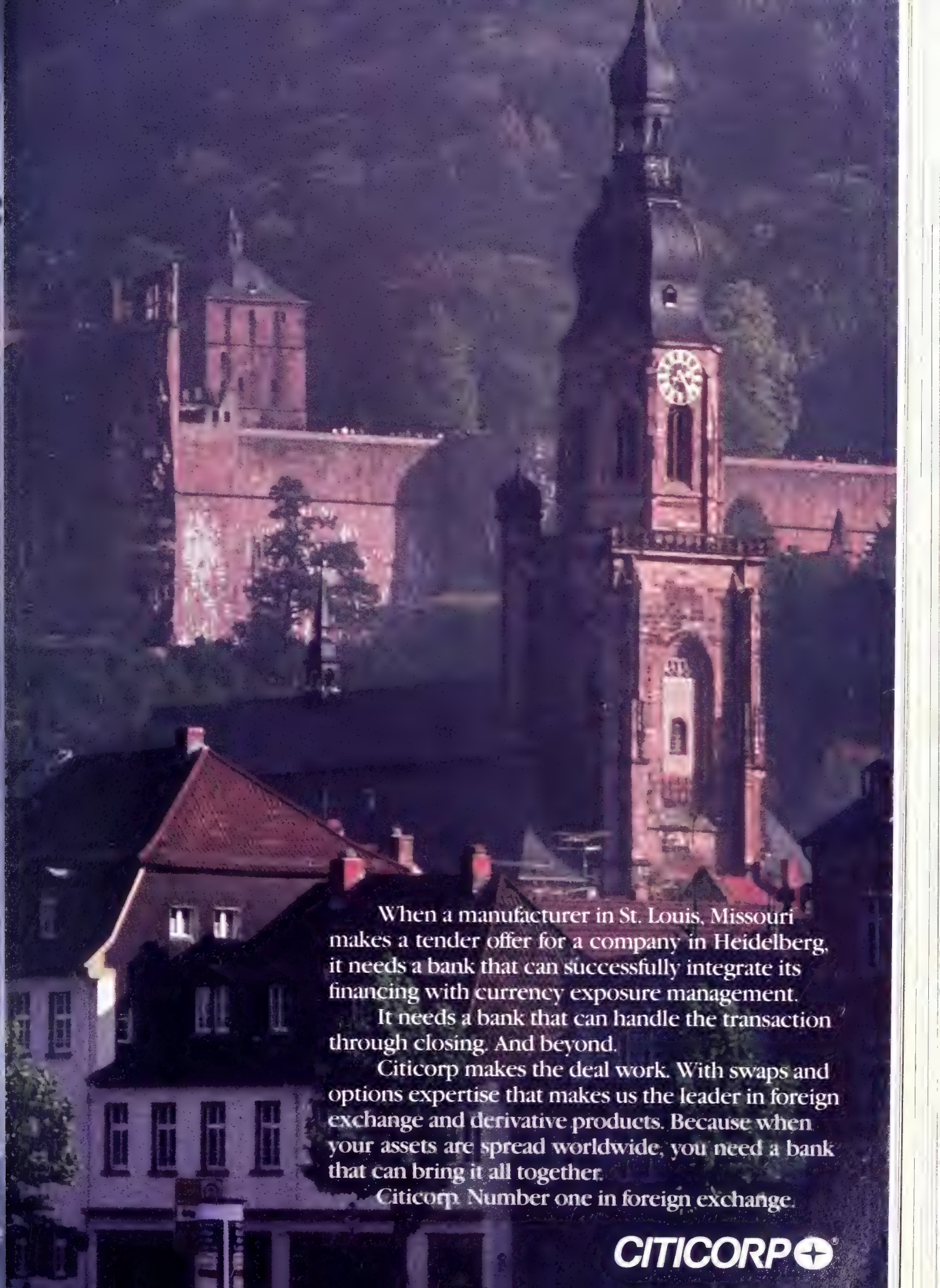
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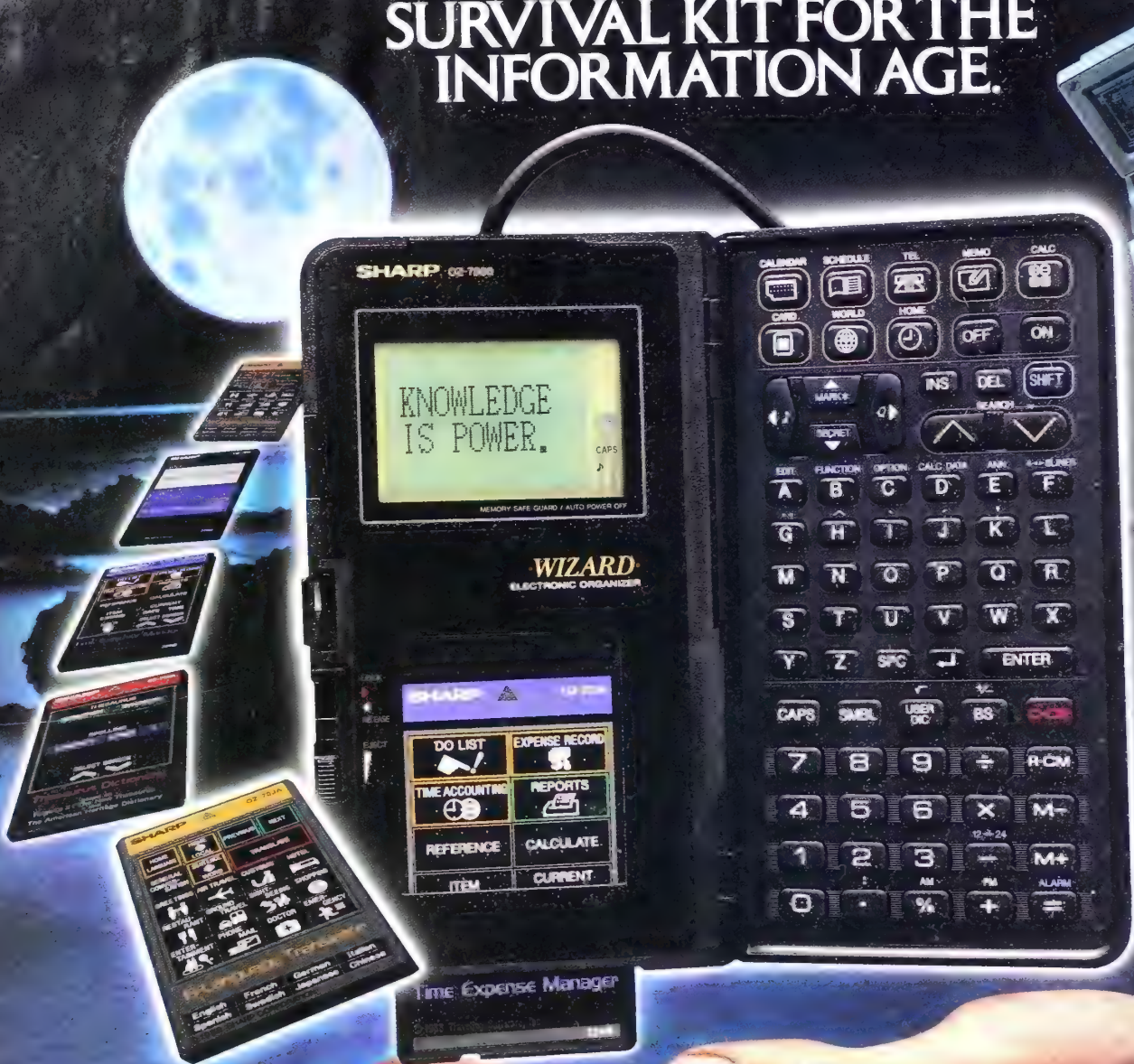
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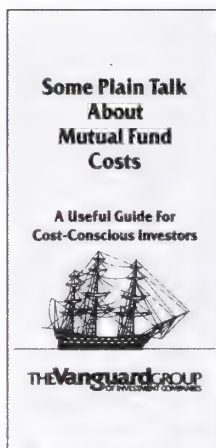
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LIGHTING UP THE BIG BOARD: THERE AREN'T TOO MANY YEARS WHEN THE STOCK MARKET DOES BETTER THAN IT HAS ALREADY DONE

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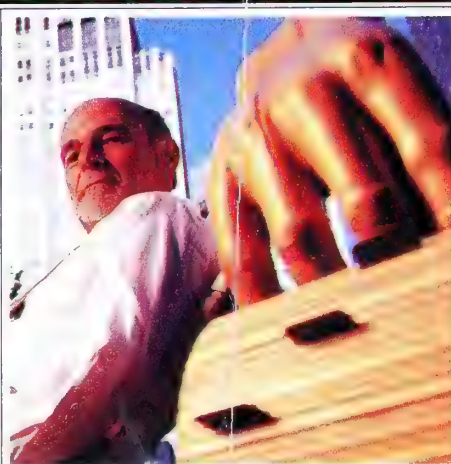
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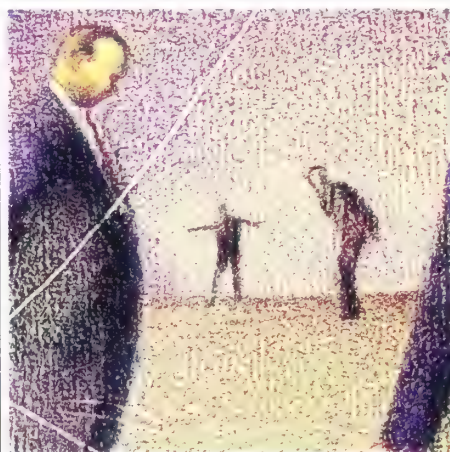
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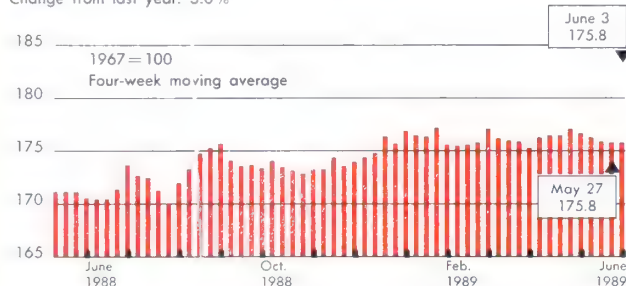
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PRODUCTION

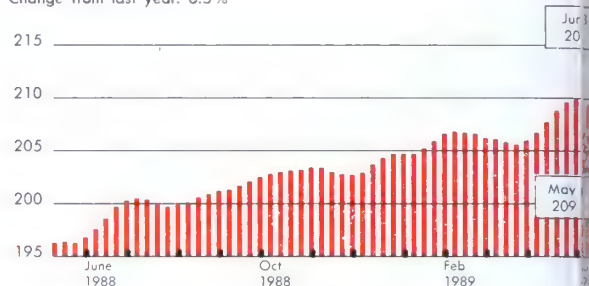
Change from last week: 0.0%
Change from last year: 3.0%



The production index was unchanged for the week ended June 3. Seasonally adjusted production of autos, trucks, rail-freight traffic, paper, electric power, and crude-oil refining declined. Output of paperboard, steel, and coal was up. Lumber production was unchanged. Before calculation of the four-week moving average, the index fell to 176.1 from 177.5. That partly reflects plant closings during the Memorial Day weekend. In May, the index dropped to 175.9 from 177.1 in April. BW production index copyright 1989 by McGraw-Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: 6.5%



The leading index increased slightly for the week ended June 3. Higher prices, lower bond yields, and a faster growth rate for M2 offset slower growth in real estate loans and materials prices. The number of business failures was unchanged from the previous week. Prior to calculation of the four-week moving average, the index was unchanged at 209.6. For the month of May, the index declined slightly to 209.5, from April's 209.6 level. Leading index copyright 1989 by Center for International Business Cycle Research.

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (6/10) thous. of net tons	1,919	1,920 #	-1.4
AUTOS (6/10) units	140,945	121,995r #	-17.2
TRUCKS (6/10) units	90,287	72,054r #	6.3
ELECTRIC POWER (6/10) millions of kilowatt-hours	54,446	54,123 #	3.8
CRUDE-OIL REFINING (6/10) thous. of bbl./day	13,803	13,824r #	0.8
COAL (6/3) thous. of net tons	17,794 #	18,593	0.9
PAPERBOARD (6/3) thous. of tons	768.8 #	736.9r	2.6
PAPER (6/3) thous. of tons	730.0 #	734.0r	-1.6
LUMBER (6/3) millions of ft.	401.3 #	487.5	-5.8
RAIL FREIGHT (6/3) billions of ton-miles	17.9 #	19.7	4.1

Sources: American Iron & Steel Inst., Ward's Automotive Reports, Edison Electric Inst., American Petroleum Inst., Energy Dept., American Paper Inst., WWPA¹, SFPA², Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/14)	149	142	126
GERMAN MARK (6/14)	2.03	1.97	1.75
BRITISH POUND (6/14)	1.51	1.58	1.78
FRENCH FRANC (6/14)	6.87	6.68	5.91
CANADIAN DOLLAR (6/14)	1.20	1.20	1.21
SWISS FRANC (6/14)	1.75	1.70	1.46
MEXICAN PESO (6/14) ³	2,487	2,481	2,300

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/14) \$/troy oz.	361.100	374.200	-20.1
STEEL SCRAP (6/13) #1 heavy, \$/ton	114.50	114.50	5.0
FOODSTUFFS (6/12) index, 1967 = 100	222.8	222.9	-7.2
COPPER (6/10) ¢/lb.	114.8	117.8	-1.2
ALUMINUM (6/10) ¢/lb.	92.0	95.0	-28.7
WHEAT (6/10) #2 hard, \$/bu.	3.96	4.37	12.5
COTTON (6/10) strict low middling 1-1/16 in., ¢/lb.	61.60	64.26	-1.8

Sources: London Wed. final setting, Chicago mkt., Commodity Research Bureau, Metals Week, Kansas City mkt., Memphis mkt.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (6/9) S&P 500	325.33	321.77	21.6
CORPORATE BOND YIELD, Aaa (6/9)	9.16%	9.37%	-
INDUSTRIAL MATERIALS PRICES (6/9)	103.5	103.7	-
BUSINESS FAILURES (6/2)	NA	250	-
REAL ESTATE LOANS (5/31) billions	\$325.6	\$324.9r	-
MONEY SUPPLY, M2 (5/29) billions	\$3,083.4	\$3,079.8r	-
INITIAL CLAIMS, UNEMPLOYMENT (5/27) thous.	334	303	-

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980 = 100), Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (May)	175.9	177.1r	-
BUSINESS WEEK LEADING INDEX (May)	209.5	209.6r	-
RETAIL SALES (May) billions	\$141.1	\$140.9r	-
PRODUCER PRICE INDEX (May) finished goods	114.1	113.1	-

Sources: BW, CIBCR, Census Bureau, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/29)	\$773.9	\$772.3r	-
BANKS' BUSINESS LOANS (5/31)	318.0	316.7r	-
FREE RESERVES (5/31)	665r	324r	-
NONFINANCIAL COMMERCIAL PAPER (5/31)	122.8	122.9	-

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in millions).

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (6/13)	9.30%	9.58%	-
PRIME (6/14)	11.00	11.00	-
COMMERCIAL PAPER 3-MONTH (6/14)	9.01	9.03	-
CERTIFICATES OF DEPOSIT 3-MONTH (6/14)	9.20	9.25	-
EURODOLLAR 3-MONTH (6/7)	9.35	9.50	-

Sources: Federal Reserve Board, First Boston

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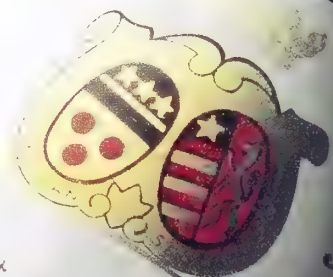


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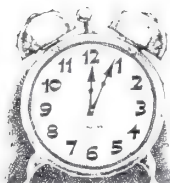
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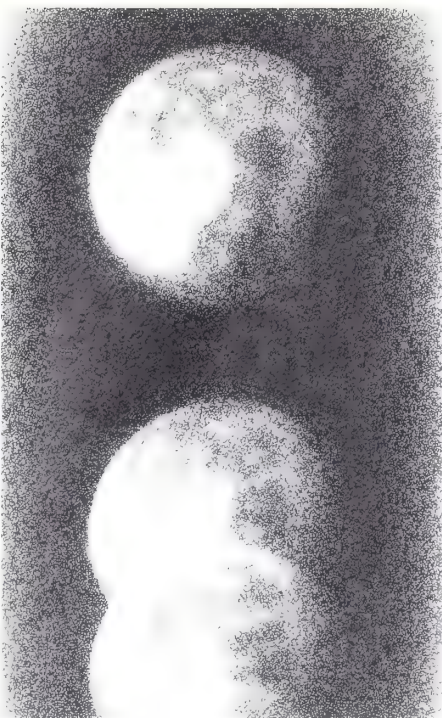
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GOOD LEADERS ARE MANAGERS—AND VICE VERSA

Regarding "So many managers, so few leaders" (Books, June 12), Professor Abraham Zaleznik apparently continues to explore the subject of leadership and points to little progress in American business in the 12 years since his 1977 *Harvard Business Review* article. One might even speculate that things are worse, for we are flooded with meaningless words like culture, commitment, quality, and excellence, which get embedded in corporate advertisements and mean little to most of us.

Perhaps Zaleznik might want to look at a different approach to his study. Instead of trying to separate and analyze leaders and managers, let's not lose sight of the obvious, which is that a really good leader is a good manager and a really good manager is also a leader. It appears that all works well until an enterprise gets to a certain size. Then parties try to separate the roles and the leader steps out and away from the business. As such, the leader falls into the trap of thinking he is above and beyond the operation and starts to "lead" by driving the organization instead of guiding it.

If we could get top management to get their feet back down on the floor and think of Zaleznik's three qualities—substance, humanity, and morality—we would see more leader/manager combinations and less of one or the other.

Thomas R. Elsman
Strategic Planning Manager
Imaging Systems Dept.
Du Pont Co.
Wilmington, Del.

WHEN PEOPLE BUY CIGARETTES, WE ALL END UP PAYING

Whatever one's opinion on the desirability of raising taxes on anything, Professor Becker's argument that "sin" taxes somehow unfairly punish the poor is dubious ("Higher 'sin' taxes: A low blow to the poor," Economic Viewpoint, June 5).

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Heart disease is the leading cause of death in America, and the majority of heart disease cases are a result of tobacco abuse. Becker asks: "Why tax so heavily adult smokers who mainly harm themselves?" The answer, in my opinion, is simple: because taxpayers end up paying for it.

The dangers of tobacco have been proven. They are not some closely guarded secret. Sin taxes may not be perfectly fair but they are a whole lot more fair than asking responsible people to take care of others who make no effort to take care of themselves. People who choose to gamble with their health should at least be required to cover their own bets. Otherwise, it's very difficult to take seriously all this thumb-sucking about "soaring health costs."

Anne Brearley
Dayton

COPYRIGHTS CAN KEEP THE WOLVES AT BAY

I disagree with your editorial "Don't use copyright to shackle software" (Editorials, May 29). What about entrepreneurial efforts of specialized mini-companies that focus intensively on the discovery of new applications and spend years of development in their attempts to capitalize on them? Who are these "innovators who must have free access to . . . technology?" Too often they are larger companies that snap the ideas up from their true originators, leaving them without compen-

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A dramatic new achievement: the right turn. This is a right turn at the bottom of a hole drilled through two miles of solid rock. Horizontal drilling, pioneered by BP America scientists, can extend the production of domestic oil fields. In fact, new techniques to locate and recover oil added more than 100 million barrels to our proved oil and gas reserves last year. We think that's a turn in the right direction.



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Readers Report

sation and with relatively little hope of recovery, even under existing law.

What the editorial seems to recommend is a return to the law of the jungle under which the real innovators are shorn of any recourse whatsoever and are gobbled up by wolves wearing time-honored logos.

Martin T. Woods
President
Cryptech Corp.
Los Angeles

THE ABCS OF AMERICAN SAVINGS

Your otherwise excellent article on the nation's need for a higher savings rate ("Have you hugged your bankbook today?" Economics, May 29) needs some clarification.

Investment can occur without savings if the Federal Reserve and/or foreigners supply funds. This, of course, can precipitate other problems.

Business savings represent not only retained earnings but also the much larger corporate and noncorporate depreciation charges.

The contribution of state and local governments is not only their pension surpluses but their overall budgetary positions.

Devices such as IRA accounts can increase overall savings as long as the percentage increase in household savings exceeds the average tax rate on personal income. If a person in the 25% bracket shelters \$2,000 but merely shifts savings from a non-IRA to an IRA, the federal government is out \$500 in revenues and total savings drop.

As far as getting the average American to save at a higher rate, the reality may well be that the act of saving is not so much related to yields but rather is cultural, habitual, and/or demographic. Thus, the burden of increasing total savings falls essentially on the public rather than on the private sectors.

Herbert M. Bernstein
Economics Dept.
Drexel University
Philadelphia

DON'T SLUR THIS 'GROUPWARE' PROGRAM

I am writing in reference to the characterization of our company, Action Technologies Inc. and one of its software products. In "'Groupware': Big breakthrough—or big brother?" (Software Report, June 5) you state: "Critics, though, call the program 'Naziware'—a stinging criticism for

Flores..." This type of journalistic grandstanding is unwarranted and offensive.

The history of this comment reveals that it was uttered by an assistant professor who has a commercial interest in a competing product. He made this characterization in a public forum and has since apologized and promised not to do so again. Your publication has always connoted professionalism and high journalistic standards. Surely BUSINESS WEEK won't sanction unfair reporting of this nature.

Thomas E. White
President
Action Technologies Inc.
Emeryville, Calif.

Your mention of Enable Software's main feature—allowing a person's work to be more easily monitored—brings up the issue of accountability, not the technique used to observe it.

For example, in a company that views itself as a treadmill, and under a supervisor that views his or her role as a taskmaster, such a tool would be unwelcome by employees because accountability only holds the threat of degradation in such an atmosphere.

In contrast, in the hands of a manager who recognizes that the company's purpose is to learn how to work better (not just harder), and that his fellow employees are all deserving of simple dignity, then the facts on productivity will prove instructive and valuable instead of feared.

Thomas J. Iglehart
Brookline, Mass.

SECOND THOUGHTS ABOUT CAPTURING DOLPHINS

I would like to respond to the article "Close encounters of the dolphin kind" (Personal Business, Apr. 10). There has been a recent upsurge in the desire to interact and connect with dolphins. The facilities you mentioned in the Florida Keys do provide interactive programs and have been in existence for a long time. You were correct in stating that these programs are controversial, and hopefully the National Marine Fisheries Service will err on the side of caution when reviewing these programs in determining what is currently best for these dolphins.

But the dolphin program at the Hyatt Regency Waikoloa in Hawaii was created for the sole purpose of a commercial venture and has set a new precedent for the capture of more wild dolphins. I hope that the business community is able to distinguish between the purposes of these facilities and will

selectively choose. Many researchers themselves now object to the capture of wild dolphins for research purposes. We know too much about their complex social structure and family life to justify such capture.

Anyone who has witnessed the capture of dolphins for display purposes can see that these animals do fight their lives and survival of their families.

Denise Henkel
Research Director
Wild Dolphin Project
Lake Park, Fla.

PENTECH'S SPONSOR IS ALIVE AND WELL

The cover story "Hot growth companies" (May 22) contains the following sentence: "Pentech's Melnick lost his sponsoring broker to the market crash." Russo Securities brought Pentech public through its primary offering. Russo, which emerged from the crash unscathed, continues to do business as usual.

Diane Issel
Russo Securities
New Orleans

Editor's note: The statement refers to Beuret & Co., the broker for Pentech's secondary offering, which was completed in July, 1987.

FLEMING DID A LITTLE BUYING, TOO

In your special issue (The BUSINESS WEEK Top 1000), Fleming Cos. was identified on the Top 200 Deal list as having sold its White Swan food services operations to a group led by management and Merrill Lynch Capital Partners for \$232 million.

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Donald E. Jean
Corporate Planning Director
Fleming
Oklahoma City

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John C. Marous
Chairman and
Chief Executive Officer

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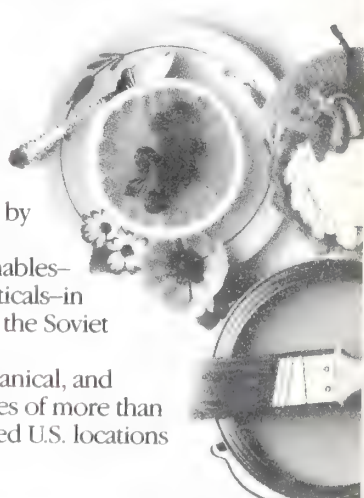
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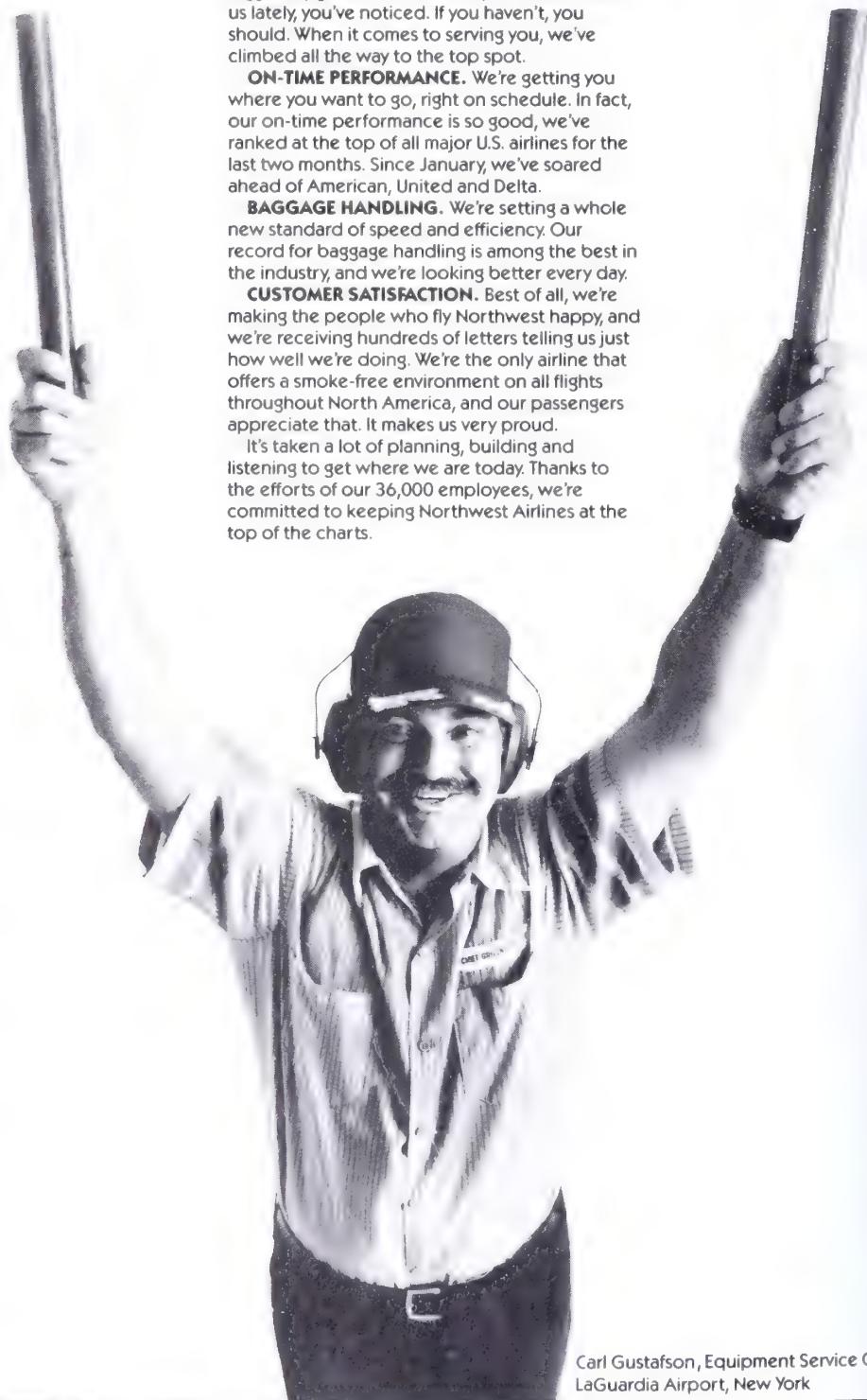
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NEW REALITIES: IN GOVERNMENT AND POLITICS/
ECONOMICS AND BUSINESS/IN SOCIETY AND WORLD VIEW
Peter F. Drucker

& Row • 276pp • \$19.95

PETER DRUCKER MAPS BRAVE NEW WORLD

Think back to your college days. You're in a local pub, knocking back a few with the smartest guy now. His arms slice the smoky air, opines on the big political question of the day, drawing historical parallels and citing philosophical precepts the way. You're dazzled by his on, awed by his bravado. Your's spinning.

A good reason. The next day, you only remember what your friend though you're convinced it was brilliant—that's how most readers will rebel at the beginning and end of P. Drucker's new book. The man, a guru and economist leaves few actual stones unturned as he depicts a world that somewhere between 1973 crossed a "divide" to new, social, and economic realities.

Fortunately, the core of Drucker's book, where he elaborates on the many strands of this theme, is more solid. He bolsters his case for a new world view with anecdotes, examples, and recommendations. But he emphasizes that instead of outlining what to expect in coming years, he intends to alert us to changes already taking place and suggest an "agenda" for the present.

Drucker contends that government—be it in the West, the communist nations, or the Third World—can no longer act as a savior for its citizens. The political process can no longer unite large blocs of interest groups. Economic theory can no longer describe transnational markets, businesses, and relationships, nor can economic policy control them. Likewise, at the individual level, everything is in flux. Even the way we manage

other people and spend our leisure time is undergoing a transformation.

A lot of this you know in your gut, but Drucker reasons it through. And he avoids ideological pigeonholes: His opinions are simply too broad. His criticism of high taxes, especially as a redistributive tool, echoes the arguments of supply siders. But he takes a tough environmental stance, urging that polluters be "quarantined" by transnational laws prohibiting shipment of their goods.

Drucker believes that government's role in nurturing the economy, as recommended by John Maynard Keynes and practiced by Franklin Delano Roosevelt, has long outlived its usefulness. Privatization is the new wave, he says. The tax burden should be lightened. And government should focus on standard-setting for industry and institutions.

Still, Drucker acknowledges, we clearly require some sort of leadership or vision in government. A "new pluralism," characterized by dozens of constituencies with conflicting goals, has led to political paralysis in the U.S. Somehow, new alliances must be formed to deal with problems, such as shoring up the educational system, that transcend different interests. Further, Drucker notes,



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Books

there are huge political tasks ahead: relieving the "increasingly counterproductive burden" of arms spending, saving the global environment, fashioning a foreign policy response to the crumbling of the Soviet empire. But Drucker warns us to beware of charismatic leaders. Today we need the "gray workaholic experts" committed to solving problems.

The earliest crisis, though Drucker doesn't explicitly say so, may come in the economic sphere, where policy collides with reality every day. Drucker is perhaps at his strongest in his analysis of the changing economic winds. The nation-state, he argues, is but one of four units that now function, often in overlapping ways, in the world economy. The second is the region, such as the European Community or North America. The third is the global flow of money, credit, and investment. The final unit is the transnational enterprise, which views the world as one market.

How should policies be tailored in an environment made up of such "partially dependent variables"? Drucker tackles the trade issue, explaining that trade has changed from a "complementary" form of commerce, benefiting all parties, to an adversarial relationship that in the



DRUCKER: GOVERNMENT CAN NO LONGER ACT AS A SAVIOR FOR ITS CITIZENS

extreme can become a fight to the death. To prevent some nations from wiping out entire industries in others, Drucker recommends the kind of regional integration we are seeing in the EC and between the U.S. and Canada. But he may be optimistic about how trading blocs and power-sharing will work.

The unifying thread in Drucker's wide-ranging observations is the advent of the information age. In fact, there is a flow of information that is precisely what has created the network of far-flung global relationships that he examines. In our "knowledge-based society," information is the key resource and building block.



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if readers are occasionally frus-
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rather than providing all the an-
s. In that respect, he has succeeded.
this book, and let your mind wan-
ward some answers of its own.

BY KAREN PENNAR

Pennar is BW's Economics Editor.

BOOK BRIEFS

MADE IN AMERICA

By M. Dertouzos, R. Lester, and R. Solow
MIT Press • 344 pp • \$17.95

Senior executives trying to explain away their dismal record in managing America's industrial empire won't find any help in *Made in America*. Two years in the making by a panel of prestigious economists, scientists, engineers, and management gurus at Massachusetts Institute of Technology, the book debunks the usual alibis invoked to rationalize the decline of U.S. manufacturing. These include unfair foreign competition and federal meddling. Instead, the finger of indictment points unwaveringly at the corner office.

Mincing no words, the MIT Commission on Industrial Productivity charges that management is far too preoccupied with short-term results, bogged down by outdated strategies, wedded to parochial technologies based on yesteryear's mass production, bedazzled by financial chicanery, and profligate with its most precious resource: people. Unless management recognizes its shortcomings and acts promptly to boost productivity, the study warns, the fiasco that happened a

decade ago in consumer electronics could be replayed a decade hence in other industries. The stakes are nothing less than America's future wealth and political power.

Focusing on eight industries, each of which gets a chapter in the book, the MIT researchers visited more than 200 companies in the U.S., Japan, and Europe. They found a persistent pattern of U.S. management failures cutting across all industries: "American companies are no longer perceived as world leaders, even by American consumers." Fixing that will take "wrenching changes at all levels of organization," the panel states.

There's little in this book that will be new to followers of the competitiveness issue. Among the "imperative" changes prescribed is a reorientation of business-school curriculums—deemphasizing short-term profits in favor of long-term innovation and productivity—so that tomorrow's managers will understand manufacturing. Still, the insights are presented in a "bottom-up" approach that eschews arcane economic theories. Should U.S. shareholders ever decide to form a political action committee to restore the American dream—a better, richer life for their children—*Made in America* would be a good handbook.

BY OTIS PORT

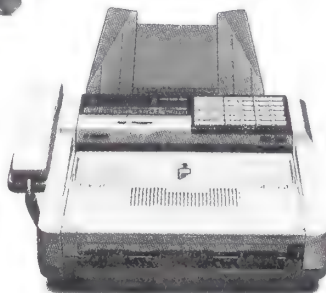


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WHY IS THE FED STILL TRYING TO KILL THE EXPANSION?

BY PAUL CRAIG ROBERTS



The money supply is growing slowly, the dollar is up, gold is down, and commodities are off their peak. But the Fed sees inflation around every corner—and persists in its drive to smother the economy

There's little doubt that the Federal Reserve Board has again been making mistakes with monetary policy. The question is whether its mistakes are fatal.

It's a mistake for a central bank to resort to negative money growth in order to maintain high interest rates in the face of falling credit demand and a reduction in inflationary pressures. None of the Fed's guides for monetary policy supports tightness or the predictions of inflation. Money-supply growth rates are extremely low, the dollar is up, gold is down, commodities are off their peak, and the yield curve is inverted, with the overnight interest rate charged by the Fed far above the rate on 30-year Treasury bonds.

Inflation requires excessive money-supply growth. But since last summer, all measures of the money supply show large and unmistakable declines in growth rates. As measured by M1, the money supply has actually been shrinking all year. If investors shared the Fed's inflationary outlook, the dollar would be falling, and gold and long-term interest rates would be rising—the opposite of what's happening.

DOUBLE WHAMMY? The U. S. Chamber of Commerce, no friend of inflation, believes that the Fed has braked too hard. Since monetary policy operates with a lag, even if the Fed were to dramatically reduce interest rates, there's already enough tightness in the pipeline to make the second quarter of this year weaker than the first—itsself a dramatic slowdown from the last quarter of 1988.

Normally, the Fed follows market interest rates up during booms and down in recessions, thus accentuating, rather than counteracting, the business cycle. This time, the Fed may do even worse. Alarmed by the expansion's longevity, it pushed interest rates up, but despite three successive quarters of negative real money-supply growth, the Fed has resisted following market interest rates down. If there is too much foot dragging, the Fed will hit the economy with a double whammy, as it did in 1981-82.

The world faces the possibility of recession because too many policymakers are operating on the basis of the defunct Keynesian fiscal theory of inflation. According to this view, budget deficits are inflationary—an article of faith that survives despite facts to the contrary.

It's extraordinary that European policymakers persist in blaming inflation on the U.S. budget deficit when statistics from the Organization for Economic Cooperation & Development show that most European countries have a larger deficit in proportion to gross national product than the U.S. The main excep-

tion is Britain, which has a budget plus. Yet it has the highest inflation interest rates in the industrial world—and a record trade deficit.

BLIND LUCK. The inconsistency of facts with conventional explanation dictates the minuscule role facts play in the understanding and conduct of economic policy. Today, just as in 1981, the Fed and policymakers around the world are unable to make the obvious connection between the collapsing supply of dollars and the rising price or exchange value of the dollar.

It's a rare occasion when the Fed succeeds in fine-tuning the economy to produce a "soft landing." The odds are not attractive, though blind luck can prevail. More often the Fed misses the boat completely, as it did in the mid-1970s when former President Gerald R. Ford made a classically ill-timed move, announcing "Whip Inflation Now" programs and handing out WIN buttons just as the economy tumbled into recession. Ford's economic adviser at the time was Paul Greenspan, currently Federal Reserve chairman.

The Reagan expansion has been remarkable not only in its length but also in the absence of the Phillips curve trade-offs between inflation and employment that bedeviled the economy after Keynesianism. But perhaps the unique characteristic of the Reagan expansion is its relative independence of Federal Reserve policy.

Unlike the expansions of the 1960s and 1970s, this one has not been led by Federal Reserve policy of easy money and low interest rates. To the contrary, the Fed has resisted this expansion many steps along the way.

Moreover, the Reagan economy lacked psychological support from Wall Street, the media, and from much of the government itself. This expansion has taken place despite constant outpourings of doom and gloom, whether from pundit directors and Wall Street prophets predicting massive deficits as if the eye can see or from the latest best-seller predicting an economic catastrophe tomorrow.

A negative outlook has been the norm since the early days of the Reagan recovery. As far back as January, 1981, *The Washington Post* wondered why Reagan thinks "when he reads the daily bulletin (co-authored by his advisers without attribution) announcing that nobody in the country agrees with the President's economic policies."

Perhaps the Fed has finally succeeded in stifling the economy's expansion. On the other hand, an economy growing for reasons of its own may continue to frustrate the Fed's efforts to slay it.

PAUL CRAIG ROBERTS HOLDS THE WILLIAM E. SIMON CHAIR OF POLITICAL ECONOMY AT THE CENTER FOR STRATEGIC & INTERNATIONAL STUDIES IN WASHINGTON

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ENE KORETZ

CAPITAL SPENDING ISN'T GROWING WHERE IT COUNTS

On the surface, capital spending is on a roll again, promising to bolster American industry's competitiveness and provide it with the capacity to expand its position in fast-growing world markets. According to the latest Commerce Dept. survey, U.S. firms plan a 6.5% rise in real investment outlays this year on top of last year's sharp 10.1% surge (page 55). In the critical manufacturing sector, however, the prospects are less promising.

INDUSTRIAL CAPACITY: ALMOST NO GROWTH



PERCENT CHANGE

SOURCE: COMMERCE DEPT., MORGAN STANLEY & CO. ESTIMATES

Not only are its investment expenditures projected to rise only 3.6% in real terms this year, compared with 12.8% last year, but durable-goods makers have cut their planned increase to an estimated 1.4%. And as economist Stephen Roach of Morgan Stanley & Co. observes, such a slowdown "implies virtually no net growth in the nation's industrial capacity."

The lagging pace of U.S. industrial capital formation, of course, is hardly a new development. In the early years of the decade, when industry went through a period of intensive restructuring, many companies focused on closing old and obsolete plants and modernizing existing ones. As a result, although capital spending rose sharply in the first years of the expansion, the manufacturing capital stock grew at less than a 1% annual rate, compared with 3.7% in the 1950-82 period.

But as capital spending reaccelerated last year, however, economists expect the surge reflected a willingness of a leaner factory sector to shift

more of its outlays toward capacity expansion. But, as Roach points out, recent Commerce Dept. statistics indicate that industry still allocated 96% of its investment outlays for replacement spending, leaving only 4% for capacity growth. The upshot is that the factory sector's capital stock rose only 0.9% last year. More important, says Roach, "the core component of the manufacturing capital stock—the heavy machinery and industrial plants that account for over 82% of total industrial capacity—edged up only 0.3% after declining slightly in the previous two years" (chart).

None of this bodes well for the U.S. economy in the decade ahead. Having streamlined their operations, American manufacturers still seem slow to expand capacity—a reluctance Roach attributes to such factors as the high cost of capital, the uncertainties created by volatile foreign-exchange markets, and the loss of investment incentives under tax reform. In the short run, he says, the shortfall in capacity expansion has a bright side, in that it suggests that capital spending will remain relatively strong during the next recession, limiting the size of the downturn.

In the long run, however, the stagnant pace of industrial capital formation threatens to retard the nation's economic progress and lead to a loss of world market share for U.S. industry. "Unless Smokestack America starts investing for the future," says Roach, "that future will be one of lagging productivity gains, chronic inflationary pressures, and falling living standards."

GASOLINE PRICE HIKES ARE CURBING THE URGE TO SPLURGE

Sharply higher gasoline and oil prices spell inflation, but they're also partly responsible for the recent slowdown in consumer spending and economic growth, notes economist Maury Harris of PaineWebber Inc. "That's because the higher tabs are analogous to a government-imposed excise tax, though in this case the revenues are collected by OPEC and other foreign producers," he says.

Just how heavy an impact can the gas and oil price hikes exert if they're sustained over the rest of the year? Harris figures that gasoline and oil accounted for about 2.25% of personal consumption expenditures last year, and he calculates that a one-third rise in the price of foreign oil from \$14.19 a barrel last year would soak up about 0.6% of total personal consumption and disposable in-

come in 1989. "Most of that would subtract from other consumer spending," he says, noting that gasoline sales alone accounted for 39% of the \$1.9 billion rise in retail sales through May of this year.

INFLATION: IS GOOD NEWS COMING DOWN THE PIKE?

Although the May producer price index jumped at an 11% annual rate, inflationary pressures may actually be about to ease. That's the implication of the latest move of the leading inflation index devised by the Center for International Business Cycle Research at Columbia University. The CIBCR reports that its monthly index, which tends to lead consumer price trends by five or six months, "dropped sharply" by more than two points, to 111.3, in May.

The drop was caused by easing industrial materials prices and by declines in the percentages of purchasing agents reporting higher prices and slower deliveries by vendors, both of which posted their weakest readings in several years. Meanwhile, another inflation indicator, the price of gold, recently touched its lowest level in nearly three years.

WHAT SHIFTING TRADE WINDS MEAN FOR THE U.S. AND ITS RIVALS

It's a puzzlement. While the U.S. trade deficit shrank appreciably in the first quarter as imports slowed and exports accelerated, the trade surpluses of both Japan and West Germany are continuing to rise. Behind this apparent inconsistency, says economist Robert Alan Feldman of Salomon Brothers Inc., lie "shifting trade patterns that will continue for some time."

Specifically, Feldman notes that aside from Japan, the U.S. is reducing its deficit with most of its trading partners, particularly Europe. Meanwhile, Japan boasts growing surpluses against both the U.S. and Asia's newly industrialized countries, while holding its own against Europe. And West Germany's surplus vs. the rest of Europe has been soaring.

A major factor behind these trends, says Feldman, is the global capital spending boom. It is boosting U.S. exports as slowing domestic consumption limits imports. And it particularly benefits Japan and Germany, whose high-quality capital goods are in demand even when their currencies appreciate. ■

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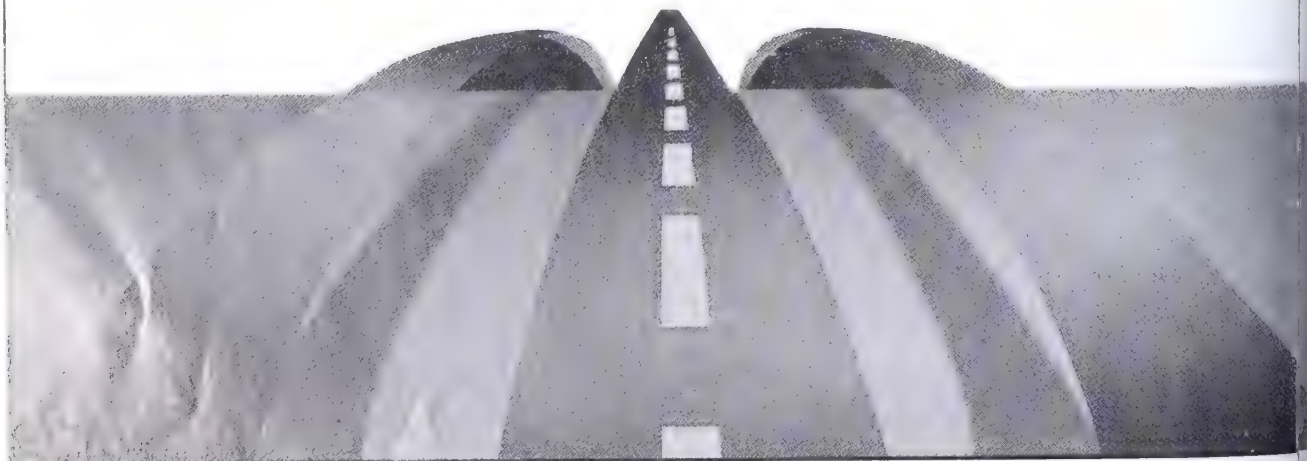
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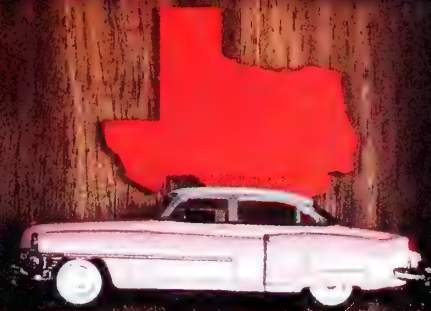
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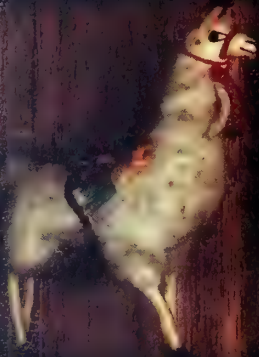
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The Family-Owned Business

*Achieving and Preserving
the American Dream*





Millions of Americans believe that in order to achieve the American dream they must work for themselves. The desire to “be one’s own boss” is becoming overwhelmingly prevalent and starting their own businesses seems the most sound way to realize their goal.

While Americans have been successfully running family-owned businesses for generations, those just starting out must keep in mind that many family-run businesses tend to be short-lived. Of the 6.4 million family-run businesses in the United States, 70% do not survive past the original founder. This rate should not discourage those interested in starting out on their own, but urge them to seek expert advice prior to investment.

Do I have the expertise to open my own business? Do I have access to sufficient capital? Can I commit myself to the time demands required? Will I be able to find people with the skills my business needs? Have I consulted with the experts? These are only a few of the questions that need to be answered before embarking on the American dream.

America’s most successful and well-known family business founders not only had a unique and inventive idea but also had an undying will to persevere. Examples of this hard-headed persistence are Joyce Hall, a Nebraska farm boy who sold cards which he stored below his bed at a YMCA and built the Hallmark we know today; J.W. Marriott, who opened a nine-seat root beer stand on a sweltering day in the nation’s capital created the extremely successful Marriott conglomerate; and a Baltimore pharmacist who decided to market his skin cream because a patient claimed it cured his eczema—his dream lives on today with his grandson heading the prosperous Noxell Corporation. These and other large successful corporations of today were once the small companies of yesterday. Although their annual sales range from a few hundred million to billions of dollars, they have remained committed to the business tenets on which they were founded.

Over the next several pages we will present the success stories of several American family-run businesses. These first-hand profiles of thriving family businesses will outline what it takes to make it in America. Their stories will not only provide the guidelines for implementing profitable strategies, but will enable all who read them to share in the fulfillment of the dream. ♦

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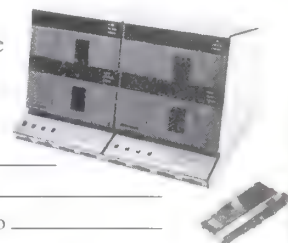
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Turning Bums into Gold

Ten years before the turn of the century, the Brooklyn Dodgers joined the National League, where they have resided for 100 years. In 1941, 38-year-old New York lawyer, Walter O'Malley, replaced Wendell Wilkie as the club's attorney. And since 1950, when he purchased a controlling interest in one of baseball's legendary franchises, either he or his son, Peter, has run the Dodgers.

Late in May, 1957, the National League owners voted to allow the Dodgers and New York Giants to relocate to Los Angeles and San Francisco, respectively, where they opened the 1958 season. Thousands of Brooklyn Dodgers fans still have not forgiven the late elder O'Malley and the league for sanctioning the move. However, regularly drawing more than three million fans a season in their 81 games at Dodger Stadium, the "Bums from old Ebbets Field" have proven that the O'Malleys struck gold in California.

Peter O'Malley, 51, has headed this family business since 1970. After graduating from the

University of Pennsylvania's Wharton School in 1960, young O'Malley decided to go to work for his father. At first, he had nothing to do with running the team during the regular season. Following a summer with their spring training operations at Vero Beach, Florida, where the team still trains, the young executive became president and general manager of the Dodgers' highest-level, Triple A farm team in Spokane. "It was a great training ground," observes the chief executive. "I got baptized quickly into all aspects of running a ball club—unions, stadium operations, radio, television, season tickets, and selling popcorn and hot dogs." He adds, smiling, "One thing no one can accuse Dad of doing was placing his son with a good ball club. We had the poorest record in the entire Dodger system."

Two years later, Peter O'Malley joined his father in Los Angeles as vice-president for stadium operations. "Of course, since I am president now, I pay close attention to all aspects of our club, but one of the most crucial is still stadium operations. In other words, if fans aren't happy at the game, they won't keep coming back."

Peter O'Malley learned well and he and

1959 LOS ANGELES DODGERS



1955



1959



1963



1965



1981



1988

TOP ROW FROM LEFT: Don Drysdale, Johnny Podres, Roger Craig, Charlie Neal, Carl Furillo. SECOND ROW: Bill Bowerman, Tommy Klippstein, Don Zimmer, Ron Fairly, Rip Repulski, Joe Pignatano, John Roseboro, Harold Wendler. THIRD ROW: Duke Demeter, Duke Snider, Clem Labine, Art Fowler, Gil Hodges, Stan Williams, Sandy Koufax, Wally Moon, Jim Gilliam. FOURTH ROW: Danny McDevitt, Norm Larker, PeeWee Reese, Joe Burke, Walt Alston, Chuck Churn, Maury Wills. FRONT ROW: Red Tesh, Doug Anderson.

agues adhere to the old adage, "Give customers what they want." Of course, good teams attract fans. In southern California's weather doesn't hurt. But the Dodgers, with their modest ticket price and religious attention to detail, not only attract those three million yearly patrons to a 56,000-seat stadium, but 27,000 seats are sold to season-ticket holders. "Yes, we're proud that so many fans keep coming back, but we've never taken them for granted. We pay close attention to what they like and don't like and no detail is too small. As in any business, you can never stop satisfying the customer." The Brooklyn Dodgers won only one world championship, in 1955; in Los Angeles, they've captured the title including last year's dramatic crown, highlighted by Kirk Gibson's made-in-Hollywood home run. Peter O'Malley thinks that much of their success can be attributed to being a family-run business. "I know it sounds self-serving, but I'm the only owner in baseball who is on the job every day, everyday. The Dodgers are my business, my life. They've been my life for a long, long time. I spend all day and most of the night right here at Dodger Stadium."

Tommy Lasorda, the famous and colorful former manager, who is in his 13th year at the helm, is 40th in the Dodger organization, proudly telling fans to the world that he bleeds Dodger blue. "Can I say? I really mean it when I say I love this organization and wouldn't dream of being anywhere else. It's like one big happy family, and I'm heading it, I'm sure it will stay that way." Like Williams, a former star college baseball player, who heads the Dodger publicity department. "As you've observed, Tommy is exactly what everyone expects him to be. He truly loves the team. One thing I really admire about him is, if I need to appear anywhere for a good cause, kids, handicapped or elderly, he'll do it for nothing on his own's notice."

No team in baseball has as many alumni players in its organization. Major league coaches Joe Torre, Manny Mota, Ron Perranoski and Bill Russell were long-time Dodger stars. Instructors at the Dodger organization include Tommy Davis, Steve Smith and Johnny Podres. Don Drysdale, the all-of-fame pitcher, is an announcer and Don

Sutton, another former star hurler, is breaking in as a broadcaster. And the team's greatest hurler, Sandy Koufax, teaches pitchers the craft that, arguably, he performed as well as anyone ever has. "I really have been part of the Dodger family for years, so maybe I'm not the most objective observer. But even in this very competitive business, you're treated like a member of the family. For example, on some clubs, if a team does poorly for a year or two, the manager is fired. But you didn't see Peter letting Tommy go after a couple of off years. Stability counts in this organization."

"I've never been with another club," Orel Hershiser begins, "but Walter Alston managed for more than 20 years (23). What did they do after Tommy had a losing season? They signed him to a new, three-year contract. I think that tells you something about the Dodgers when it comes to promoting stability and rewarding loyalty." ♦

Staying Right on the Button

In 1885, James Shakespeare McKee, exploiting the unique quality of mussels in the Mississippi River at Muscatine, Iowa, started what became the world's largest manufacturer of pearl buttons. At one time, 65 button companies were located there. Only a handful remain. According to the founder's grandson, Theodore F. McKee, who heads the family business, "We really don't have to be here, because everything is now made out of synthetics. However, this is home, and we have no intention of moving." Although it has been modified and expanded to 30,000 square feet, the McKee Button Company's headquarters stands a stone's throw from the Mississippi just as it did when it was built in 1907.

Ted McKee joined the firm in 1953. At the time, annual sales approached \$900,000. Today, revenues are just under \$5 million, with profits around \$500,000. Buttons remain the genuine pearl in McKee's business, accounting for 85 percent of sales. The output is staggering. They turn out 100,000 gross each week, with an average of 144 buttons per gross; which comes to nearly 750 million buttons a year.



Buttons on the assembly line. Buttons made out of mussel shells from the Mississippi River.

The fully integrated firm, which is one of the three primary suppliers of buttons for men's high-quality shirts, sells to every well-known company, including Van Heusen, Hathaway, Cluett-Peabody and Brooks Brothers.

Ted McKee is not planning to retire soon, but he spent last winter in Florida, returning only three times. "Of course, I was on the phone a lot," he says with a chuckle. "Actually, I felt very much at ease, because I left the business in good hands."

Those hands refer to his children, all of whom are in the business. Thirty-five-year old John (Jay) explains, "I knew I wouldn't start here right after college. Dad had a rule against that. He insists that we get training elsewhere." Jay worked in financial affairs at a local bank and pays most attention to administration and finance at his family firm. "It's been a smooth transition here. Dad wanted me to come and I had no problem doing so."

James McKee, 34, came aboard 11 years ago after a stint selling cars in Muscatine. At McKee, he oversees production, scheduling and quality

control. "I wasn't sure Jim would join, but I knew he was going to ask him," states Ted McKee.

Madeline McKee Eagle, who is 29, never expected to enter the business. "We opened a retail store here at the company, and I went to work there. I liked it, but we soon realized that we had made a mistake. There just wasn't any walk-in traffic," McKee was able not only to admit that they had made a bad decision, but equally important, to quickly get out and cut their losses. Unfortunately, many family businesses from giant corporations to small stores, are not willing to admit errors or change directions. Today, Madeline is a bookkeeper at McKee Button Company.

In addition, Mark, 28, is a supervisor in the molding operation, and Margo McKee Hamshere is a part-time sales representative in Tulsa for the family firm.

One wonders why a major shirt company doesn't stop buying tons of buttons from McKee and start making their own. "It just wouldn't be worth it to them," says Ted McKee. "We have been at it for a long time and have such a good track record for quality and reliability."

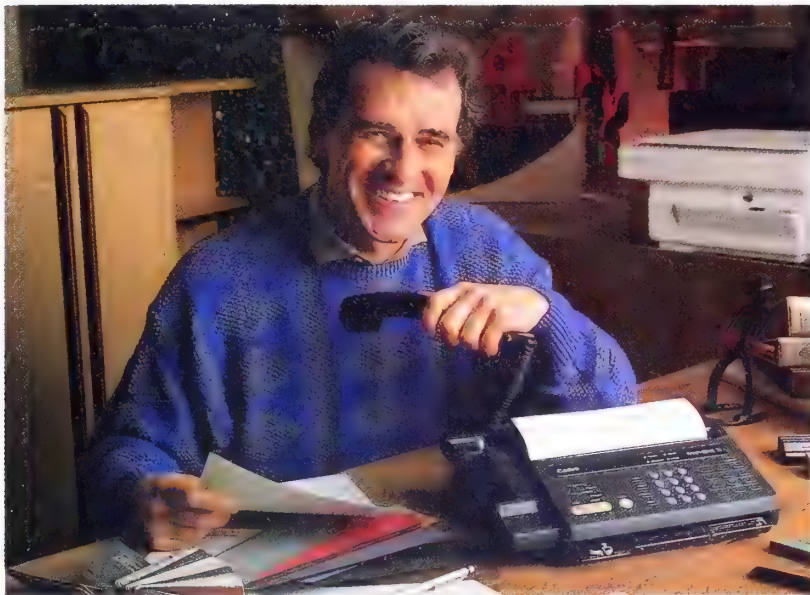
Perhaps next winter Ted McKee will go to Florida for an even longer time. He knows that somebody, namely his own children, the fourth generation, is minding the store, and it looks like they plan on staying around for a long time. ♦

You Can Go Home Again

Last summer, Alice L. Walton founded an investment bank, Llama Company, and Llama Asset Management Company in Fayetteville, Arkansas, a prosperous university community in the state's scenic, northwest Ozark region. "I grew up not far from here, and even though this part of the state is doing very well economically, most of the state isn't. I wanted to come home to help."

Walton, 39, raised \$26 million to help improve the plight not only in her native state but throughout the Mid-South, Southwest and parts of the Mid-West. Yes, she had the benefit of being the only daughter of Sam Walton, founder of Wal-Mart.

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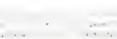
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The Alternate Route.



Stores, who in only 26 years, rose to be the nation's third largest retailer. But she worked hard to master the investment world, and is out there fighting on her own.

A graduate of San Antonio's Trinity College, Alice Walton went on to graduate school at Tulane University. "I fell in love with finance and statistics at college," she points out. "That doesn't mean that I didn't give Wal-Mart a try. I didn't want to be looking over my shoulder questioning whether I made the right career move." "I was a buyer of women's and children's clothes, and they're still trying to get rid of the school dresses I bought."

While attending Tulane in the evening, Alice Walton worked at a local bank, where she rose from clerk to head of research. After four years, she joined a major national investment firm where she was a broker specializing in retail investment

accounts.

Eight years ago, she returned to Fayetteville to oversee the investment portfolios for a group of commercial banks. "I never thought I'd come back here. Growing up, I thought that I wanted to live in the city. I love New Orleans and New York, but I feel I have the best of both worlds here."

With Llama, which is named after her favorite animal, Walton is filling a void that has resulted from the consolidation of the financial services industry and the decline of regional investment institutions.

She readily admits that northwestern Arkansas is an economic anomaly. "Tourism is a major industry here, and because of our natural beauty, mild climate and modest cost of living, we're also a major retirement region for people in the Midwest, South and Southwest. But the rest of the area is in a bad financial shape, and I want to do something



at improving things."

"Our goal is to support and make a significant difference in the economic development of the region. We're emphasizing the importance of creating jobs in the plants and factories, developing small businesses and building up the infrastructure." Specifically, she is targeting the Delta region of her state, Oklahoma, Texas, Louisiana, Mississippi and Missouri.

Following a long, thoughtful pause, Alice Johnson, who chose to go her own way rather than following her father's extremely successful family business, proudly proclaims: "I was a product of public schools in the rural South and I know how hard getting a good education can be. We couldn't afford a microscope in biology, but that was no excuse to give up education altogether." ♦

The Shape of things to Come

Twenty years ago, Judi Sheppard Missett, a 25-year-old actress, dancer and veteran chorus performer in many of Broadway's hit musicals, decided to fill a void. Although aerobics classes, primarily for women, were appearing around the country, none, according to Missett, combined her two lifelong passions—jazz and dance. "I didn't really start out with any master plan," observes the rural Iowa native, who has turned her ideas into a \$13-million dollar business. "Actually, I didn't realize that I was starting a business. I only knew that something was lacking in those rather dull aerobics routines, and I knew that with my dance skills, I could add a lot more enjoyment to keeping fit."



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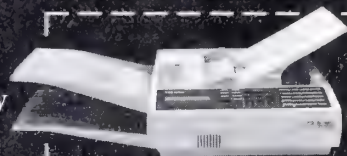
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Judi Sheppard Missett
Founder of Jazzercise, Inc.
Setting the pace in fitness for 20 years.

"Jazz is more than hops, skips and jumps," points out the Jazzercise founder. "Jazzercise is a blend of the art of jazz and the science of exercise physiology. I'm not saying that plain aerobics isn't good for you, but I feel strongly that it doesn't do what my routines do for you physically and mentally."

Judi Missett may not have set out to run a business, but her skills at entrepreneurship match those as a dancer and choreographer. Enconced in unpretentious corporate headquarters at a shopping center in Carlsbad, California, Missett oversees not only her worldwide dance class activities, but also the sale of video cassettes, clothing and cooperative advertising ventures."

"Judi is very creative when it comes to

promotion," volunteers Margaret Stanton, one of Missett's first students following the founder's move to Carlsbad in 1972. Today, Stanton, who holds a master's degree in business, is Jazzercise's executive director and chief operating officer. "We have branched out into these other areas but have never lost sight of the fact that what we do best is teach jazzercise routines."

Although Judi Missett owns all the stock of this privately held company, other family members are involved. Her sister-in-law is her administrative assistant, and Jack Missett, a former Chicago television newsman, spends most of his time as his wife's chief sounding board for new ideas.

Perhaps nobody else has Missett's creative talent, but her ability to teach others to emulate her has made Jazzercise so successful throughout the United States and 26 foreign countries. In addition to her prescience concerning women's desires to combine healthy exercise with enjoyable dance routines, Missett also realized that dance instructors, like everyone else, wanted to share the American dream.

Unlike other exercise studios where instructors are salaried employees, Jazzercise franchises in their own businesses. "We're a family business that also encourages other people to reap the rewards of their own ingenuity and hard work," observes Margaret Stanton. The Jazzercise arrangement, with its more than 3,800 franchisees, is simple. Each instructor finds her location and pays a \$500 fee for the right to use the Jazzercise name and benefit from the firm's technical advice. Ninety-five percent of the 4,000 instructors are women.

Jazzercise offers hard-working, ambitious employees the opportunity to move up the corporate hierarchy. "Promoting from within is the best way I know of letting people know that if they perform well, they will be rewarded in more than monetary terms," concludes executive director Margaret Stanton.

Where does the Jazzercise family intend to go? "Oh, we'll pay more attention to weight-management program," begins Margaret Stanton, "and programs for senior citizens, even younger children and the disabled will be emphasized."

The company's founder and president adds,

sically, we'll do what we do best. We'll make people who don't necessarily have any background experience feel good about themselves." ♦

Being Caddy, Texas Style

Four years ago, Dallas' Sewell Village Cadillac sold 3,000 of America's leader in luxury cars. "That's our all-time high," comments president Carl Sewell, who took over the thriving dealership from his father who founded it. Over the next two years, even Sewell couldn't make up for the slumping Dallas economy. The banking, savings & loan and real estate meltdowns translated into a precipitous drop in sales and profits. However, through the downturn, Sewell persevered.

When John Grettenberger took the helm at Cadillac in 1985, he called in Carl Sewell and other veteran dealers who told him what Cadillac customers wanted—a return to quality, power and performance.

Evidently Grettenberger and his colleagues were right. For 1988, the auto industry guru, J.D. Power, ranked Cadillac first among American cars in terms of it came to quality. Worldwide, it ranked second. In his preliminary report this year for J.D. Power, Power rates Cadillac first overall in its price range. Sewell remarks, "We always have prided ourselves on giving good service and good products to our customers. Customer satisfaction is what counts, and it makes me feel good to know that when someone buys a car from us, they'll be satisfied."

Sewell pampers its customers. The lounges and showroom are tastefully decorated, and the repair shop floors are immaculate. Carl Sewell continues the policy started years ago by his father—any customer who buys a car from Sewell is given a free oil change for as long as Sewell has the vehicle in for service.

Stanley Marcus, founder of Dallas' Neiman-Marcus and a long-time friend of Carl Sewell's father, says, "It sounds simple, doesn't it? Just satisfy the customer. And keep satisfying him." He continues, "Carl Sewell is just like his dad—satisfying the customer is everything."



Sewell Village Cadillac Showroom

"Every customer wants 3 things...a good product, service and satisfaction. We'll never stop giving all these to them." Carl Sewell

Carl Sewell's father, also named Carl, sold model-T's as a 14-year-old in Arlington, Texas. The cars came boxed and young Carl helped assemble them at his father's hardware store. Later, Carl lost \$25,000 in savings that were deposited in three rural Texas banks. But he did not give up. Sewell borrowed \$500 from a friend and as the oil industry continued to thrive, despite the Depression, he was able to take orders for new cars literally at oil rig sites. He continued to be successful in various dealerships in other Texas towns. It was not until 1957, when he purchased a Cadillac dealership in Highland Park, that Carl Sewell was on the road to setting Cadillac sales and service standards.

Today, the founder's son, who took over the presidency in 1972 upon his father's death, has brought sales to the \$100 million level. In addition to opening another Cadillac dealership in New Orleans, he has branched out into other lines of cars, including the low-priced Hyundai. "We'll operate the same way in this price range, too," Carl Sewell stresses. "Every customer wants three things,

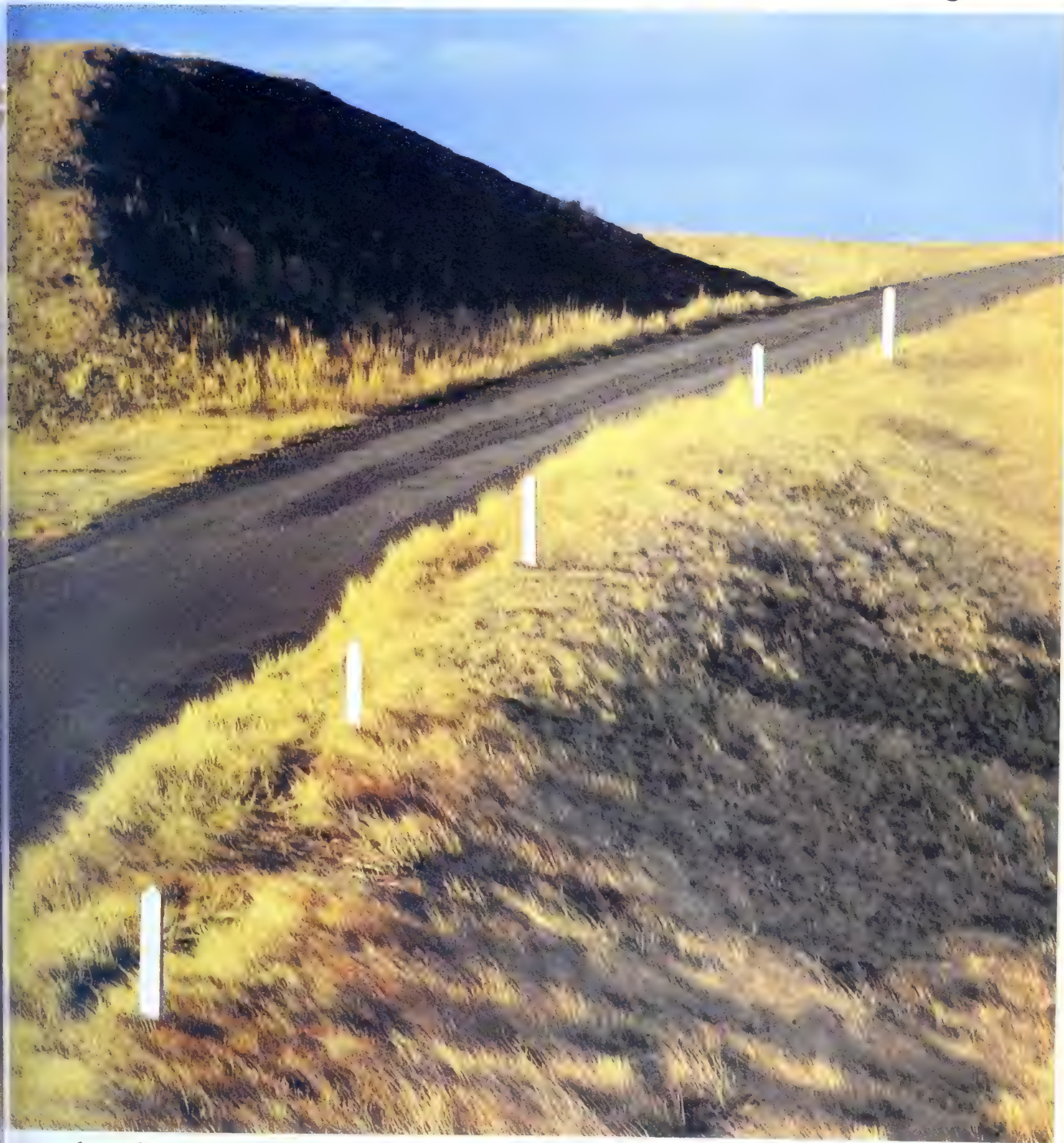
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regardless of price—a good product, service and satisfaction. We'll never stop giving all these to them." After all, as Stanley Marcus says, "Once they're no longer satisfied, you're in big trouble." ♦

Big Wheel Around the World

The Eli Bridge Company has been making Ferris Wheels in Jacksonville, Illinois since the turn of the century. Lee Sullivan, Jr., the 3rd-generation family member to head the company, points out, "We really are the only firm in the business; yes, maybe you could say we're sort of a monopoly, but it is not a contrived one. I like to believe that we're the only business that has stayed with it for so long, that we've developed an expertise that is unmatched."

Actually, Sullivan and his colleagues don't make Ferris Wheels, the term that has been used generically since engineer George Washington Ferris's invention was displayed in 1893 at the Chicago World's Fair. "Grandfather was fascinated by what he saw," begins the chief executive, "and he decided then and there that he would design a smaller, portable version of it. We've always called it the Big Eli Wheel."

The founder, like most entrepreneurs, set out on a single-minded course. Although not formally trained as an engineer, William E. Sullivan, 32, had extensive experience building bridges. And he was determined to use his mechanical ability to modify this fascinating new machine, which could be moved from park to park and carnival to carnival.

The Big Eli Wheel made its first appearance 89 years ago in this prosperous central Illinois community. "Grandfather ran the business until his death in 1932, and I'm proud to say that two of my children, the fourth generation, are already in the business and will carry on after me," observes Lee Sullivan.

Bill Sullivan, 38, serves as vice-president and sales manager of the company that is headed by his father. He sits on the five-person board of directors and has worked full-time in the family business for 12 years. "I like to think that there's something special about continuing a family-run business.

People have come to believe in us. They know that we make a high-quality product. It's expected of us and we expect it of ourselves. Lack of quality and commitment have caused other firms to go by the wayside."

The younger Sullivan believes that, since the company is family-run, members get a better opportunity to learn all facets of its operations. "I've been hanging around here since I was a kid and my father always gave me the opportunity to learn everything—from production to sales."

Today, even though Bill Sullivan oversees the company's sales which this year, for the first time, will probably reach the \$2 million level, he is not opposed to performing diverse functions. For example, this spring, he drove the eight-day round trip from Jacksonville to southern California to Knott's Berry Farm to deliver, install and serve



The original Big Eli Wheel, taken in 1900. This Wheel now stands outside their Jacksonville, Ill. factory.

A PROVEN PERFORMER

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ge's other major amusement the Big Eli Scrambler. "This the customer that members of family pay attention to our lucts all the way down the line," Sullivan points out.

Go to virtually any major amusement park in this country, or nd the world, and you'll see a Eli Wheel or Scrambler. From eyland to Six Flags over ouri and Virginia's Busch lens to India, Eli Bridge is

However, the industry is not it used to be. "With all the isticated, high-tech rides that see at major parks, we're not ised that interest in our rides aned a bit," states Lee Sullivan. remember, riding a Wheel is a of America that has always with us and we hope always be." He adds, with a chuckle, ong as there are grandparents ing their grandchildren a good there'll be room for us."

Today, there are 1,400 wheels peration. This year, the any hopes to sell more than heels and scramblers.

When University of Illinois eer Lee Sullivan, Jr. took over business from his father, the ition went smoothly. "Father ed for me to come here and he a good teacher." Recently, an's daughter, Patricia, with an A. from Western Illinois ersity, joined her father and brother at Eli Bridge. It is cted that Sullivan is grooming laughter to take over the ess someday. Bill Sullivan forward to operating Eli ge with his sister and uing in the family tradition. ♦

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Pressing Problems Faced By Today's Family-Owned Business

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- ❑ Should the family attorney be the business attorney too?
- ❑ How do you train successors without spoiling them?
- ❑ How do you hire bright managers who can never achieve their highest ambitions?
- ❑ How do you retire beloved incompetents with grace and gratitude?
- ❑ Are your directors merely decorative or nostalgic holdovers from the early days...or are they contributing to the growth of your company?
- ❑ Are your defenses in place in case of takeover attempts, proxy fights or tender offers?
- ❑ Do you know how to get out of a disastrous family business? Can you decode the distress signals? Should you sell...or try to salvage?
- ❑ What are the special investing and tax opportunities available today to family businesses and to family members in those companies?

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The Kitchens that Don't Miss a "Beet"

Richard Melman and Oprah

Winfrey opened The Eccentric, a large, eclectic restaurant which features ch, Italian, English and American food. Even though Oprah lent her name and money to the 450-restaurant, you can bet that one man and his native ideas are behind its success.

Richard Melman, 47-year-old son of a Chicago-delicatessen owner, opened his first restaurant in Chicago 18 years ago. Today, Melman heads a restaurant empire that stretches from Chicago, through Beverly Hills, to Japan. Sales at the more than 25 eateries will range from \$90 to \$95 million a year.

Melman, who sold Good Humor bars along Chicago's lakefront and hawked hot dogs on its streets, worked four years at his father's delicatessen. Eventually, Melman had enough on-the-job training to want to join his father and partner as part owner of the business, but they weren't ready for the future entrepreneur.

"I was crushed; I had proven that I was ready, they didn't agree with me."

Facing rejection, the delicatessen's son escaped to Florida, where he remained less than a year. Upon return to Chicago, Melman ran the kitchen at a restaurant on the near north side. After some time, the restaurant owner, who was impressed with his employee's good sense of the business, offered him a partnership. But he realized that he should open his own business and declined the offer.

"My real break came when I met Jerry Orzoff who was in real estate." Orzoff not only was willing to back Melman financially, but became Melman's friend. The restaurant maven still refers to his friend in a reverential tone. "Jerry really believed in me and my off-beat ideas."

Appealing to young singles who liked loud music and healthy food, the twosome christened R.J.'s in the Lincoln Park area. As they say, the rest of the story. Melman went on to open such haute establishments as Ambria, Un Grand Cafe and long-time Chicago landmark, The Pump Room.



A man who turns imaginative concepts into reality. Melman's HAT DANCE restaurant appeals to the sophisticated taste of people who delight in the unexpected.

He has added the 1950's diner, Ed Debevec's, which first appeared in Phoenix. Now, you can enjoy meat loaf and mashed potatoes, washed down with a thick shake, in Beverly Hills and Osaka, Japan, as well as in Phoenix and the Chicago area.

Loret Carbone, a 39-year-old former school psychologist in northern California, is vice president of human relations and training. Looking for a new career, she settled in Chicago nine years ago. Starting as a lunchtime waitress at the Pump room in Chicago's well-known Ambassador East Hotel, she has risen swiftly up the corporate ladder. She is a partner in the firm that innovation and food made famous.

"I know that all businesses give lip service to the idea that people count most and they hire the right ones. Well, we insist on it. I'd say we're slaves to our people. We realize one thing. In our business the food has to be good, but most of all, the staff must be outstanding. You won't go back to a restaurant where the people who work there don't treat you right." If any of the 3,000 employees has a grievance, he or she may complain directly to the founder.

Melman, Carbone and the other top staff people pay close attention to detail. "Rich Melman isn't in the office too much, because his real contribution is visiting restaurants and making sure they're run

An interesting phenomenon has been happening in the pay phone business over the last few years. Other pay phone companies have been trying to woo

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another interesting phenomenon:

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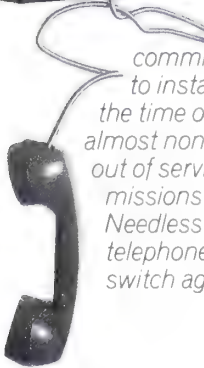
Carl Stout, who runs the Lightfoot Community Market in Lightfoot, Virginia, says it better than we ever could.

"A couple of years ago, we were foolishly persuaded, with promises of equal service and higher

commissions, to allow another company to install their phones here. From the time of the installation, service was almost non-existent, the phones were out of service more than in, and commissions were down drastically. Needless to say, we now have C&P telephones back. And we'll never switch again."

THE TRUCK STOPS HERE.

Talk about a tough group to please. How about the folks that high-ball 18 wheelers? Which is why Richard Rossbauer, who runs the Sandman Truck Plaza in Bordentown, New Jersey, is pleased to note: "We just converted all 28 of our pay phones to New Jersey Bell equipment. We have had absolutely no complaints about service, our commissions are up and our customers are not being surcharged for their calls."



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"I've been operating a family restaurant since I came out of the Navy in 1946," says Joseph Nicolella, who indeed runs the Mayfield Restaurant and Lounge in Pittsburgh. "My father started the restaurant in 1925, and we always had two public phones. As recently as last week, when we needed service, someone from Bell Atlantic was there in a couple of hours. I've never thought of switching to another phone company. I think 64 years with the same company is something to be proud of."



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To Eugene Harley of the Wild World Amusement Park in Mitchellville, Maryland, dependability is the cornerstone of his business. "Our guests grade us on all aspects. Our Bell Atlantic pay phones never let us down. For quality equipment and efficient service, there is no other choice."

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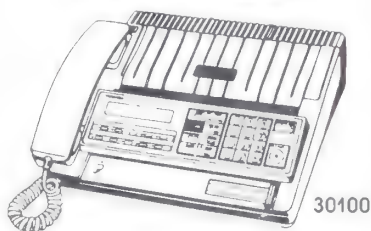
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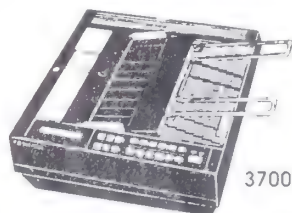
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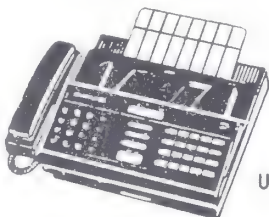
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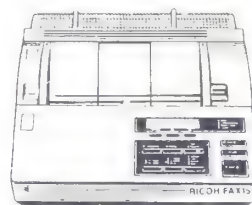
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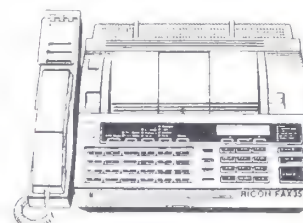
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t," observes Joseph Lanuti, Jr., who is vice president of finance. Melman concurs: "I've gotten used to delegating certain responsibilities, but my strong point is picking up minute details. That's why I spend most days in the restaurants making sure everything is working smoothly."

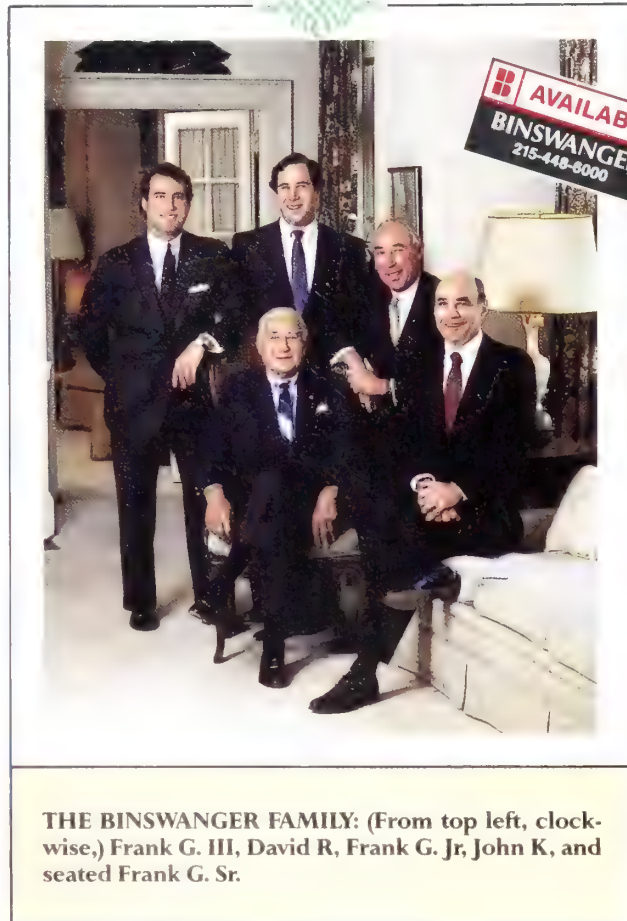
Yes, I'll point out mistakes to someone, but I'll never embarrass anybody. Sure, you have to step up, but we give everybody a chance to prove. I know, firsthand, what's it's like not to be given that opportunity."

What's in store for Richard Melman and his business? "I could quit tomorrow and probably have enough money for me, my wife and kids to live well. What would I do? What I'll do is what I'm doing now—having fun. Sure, I like doing well, but as long as all my colleagues, when it stops being fun, I'm getting out of this business." ♦

A Family "Sell"abration

Frank Binswanger, Sr., enjoys telling the story of how he went into business for himself in 1931. "You know, we were in the middle of the Depression, and I was collecting scrap metal for a well-known Philadelphia real-estate firm. Cutbacks were coming, so I decided to start in business for myself. After all, things couldn't get any worse and you didn't need a lot of start-up capital." The fledgling company plodded along for years, until, according to its founder, "We got the word that most successful businesses seem to get." In 1933, prohibition was repealed. "I was appointed real estate representative for the eastern portion of the state. The legislature came up with the idea of selling liquor at state stores, and the governor liked my idea for playing down the store fronts. As you know, lots of banks were failing, so I got the idea of using their vacated locations to convert them into stores."

Binswanger, with his considerable business experience, then acted as a broker for commercial properties. "This business is sales and selling is the main thing. You better like meeting people and shaking hands, or you're in the wrong business." Spend time with Frank Senior," which distinguishes him from his son,



THE BINSWANGER FAMILY: (From top left, clockwise,) Frank G. III, David R, Frank G. Jr, John K, and seated Frank G. Sr.

Frank, Jr., and it is readily apparent that the honorary chairman likes people.

"Most of all, the people who really count are my family. People have learned that when you deal with one Binswanger, you deal with all of us. Not only are a few of us in business together, but all 33 of us are very close. When you say family business to a Binswanger, you really mean it."

Recently, Frank Binswanger, Jr., became chairman of the firm, where he had headed the industrial division. His brother, John, 57, serves as president. The family owns all the stock of this multifaceted real estate concern which does not construct buildings, but develops properties and manages them. The company also operates sizable investment and consulting components. In addition to 15 domestic offices, Binswanger has six European affiliates and is concentrating heavily on Japan from

its Tokyo office. More than half its annual revenues are derived from the industrial division.

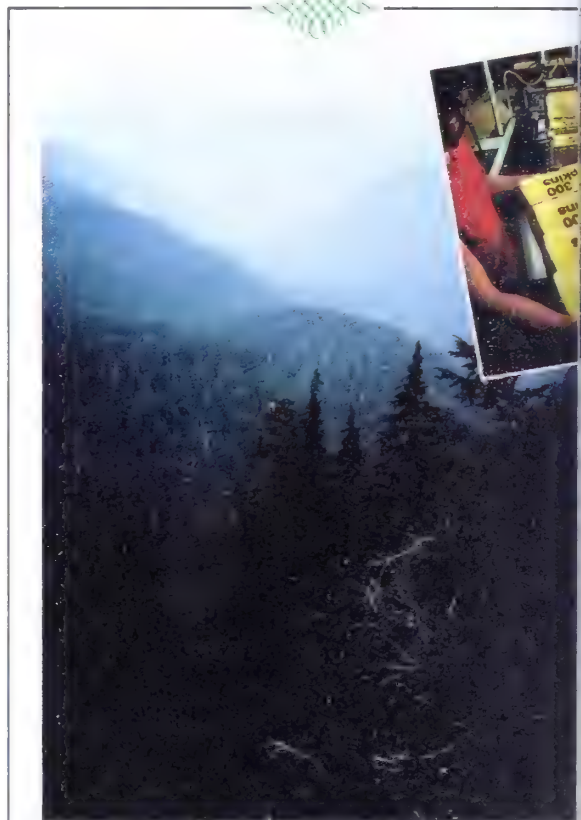
Succession from the founding to second generation, the jump that 70 percent of America's 6.4 million family businesses don't make, was well planned by the Binswangers. Thus far, it seems that the step to the next rung of Binswangers has been smooth. Frank III, or Jeff, will succeed his father as head of the industrial division. And John's son, David, leads the consulting and development section. Jeff Binswanger puts it this way. "I love this business as much as my grandfather and dad. David and I, like our fathers, have skills and interests that complement one another. We are very excited about the possibilities with Japan, and I know we can take the company into the fourth generation."

No Splinter Groups in these Woods

For over 140 years, Pope & Talbot, Inc., a Portland, Oregon-based lumber and paper products company, has been run by family members. Peter T. Pope, the 54-year-old-great, great grandson of the founder now serves as chairman and chief executive officer. With earnings of \$31.9 million on sales of \$515 million, this New York Stock Exchange firm carries on a success story that, unlike most businesses, has remained in the same family for five generations.

"Of course, it hasn't always been easy," confesses the current CEO, "We have been able to adapt to the times. Recently, for example, we've been concentrating our efforts on making private-label tissues and disposable diapers for some of the biggest name outlets in the country." A&P, Kroger, Jewel, Grand Union and Ralph's use Pope & Talbot products. "This component represents well over half our annual revenues," Peter Pope explains. Business has grown so steadily over the past several years that Pope & Talbot is one of the largest makers of these personal private-brand paper products.

Although Peter Pope owns only five percent of the company's common stock, his extended family controls 35 percent. His cousin, with 11 percent, is the largest single shareholder. Pope is proud of the



Pope & Talbot's Oregon timberlands. Paper products being manufactured.

fact that, despite the financial fluctuations of the lumber business through the years, his company has not been caught short.

Eight of Peter Pope's family members have some interest in the company, but he is the only one who toils there day-by-day. His younger brother once headed the firm, but terminated his involvement due to illness. His other brother departed to start his own tree farm business in California, and his sister is in the retail fur business in Washington, D.C.

Pope, who holds a degree in history and an M.B.A. from Stanford, always assumed he'd run Pope & Talbot. "My father did head the company, but he never really was that interested in running it. That's why he brought in the best outside talent he could find to help him." His father's basic philosophy

It's clear that Peter and his brothers were expected to carry on the family tradition.

"Sure, Dad wanted to keep it in the family, but there was a period before he took over when others tried to run it. He had a very strong feeling that the happiest people he knew were those who inherited lots of money but didn't work. It was clear that it was not to happen to his kids."

As in many family businesses, Peter Pope grew up from an early age in different areas of the company, including the steamship division which is a major part of Pope & Talbot. "I've spent time at a number of different sites connected with the firm; some of them have real historical significance. For example, we operate the oldest continuous sawmill in North America, which is in a company town that was built in 1853. It's a national historical landmark." Peter Pope has studied the history of his family-business thoroughly. "The founders of this

company worked very well together, and there was never any question about who was going to run it. You inherited your partner and successor instead of really picking them. But things got a bit more complicated." The Talbots took over during the second generation and later, during the 1920s, the company was sold. During the Depression it was repossessed and the family reacquired it in the late 1930s.

Growing up, Peter Pope knew that the business in which his family served for more than a century was there for him. His father, who controlled 51 percent of the stock, wanted it that way. The two eldest of Peter Pope's four children, Maria and Emily, work outside Pope & Talbot; Maria is an analyst at a major Wall Street investment firm, and Emily is in advertising. "They're both doing well and I wouldn't force them into our business. My children will be allowed to make their own choices." ♦

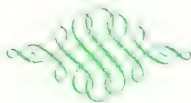


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We have examined nine diverse American family businesses.

Each is unique. Whether we are describing the 140-year-old Oregon lumber and paper products company, headed by a fifth-generation family member, or a Chicago restaurant entrepreneur who is actively involved in the company he founded 18 years ago, we note the same sound universal business principles that make family businesses survive and thrive.

Among these standards are perseverance, planning for succession, producing quality products, providing unsurpassed customer service, encouraging employee involvement—all essential ingredients of the American dream.

The companies profiled are just a sample of the success stories in the United States today. Other well-known American family-founded businesses are Kellogg, Ford Motor Company, Wang and Levi Strauss, to name a few. They are all inspirations to entrepreneurs everywhere.

These stories of men and women who have developed prospering family-run companies serve as evidence that the attainment of the American dream is very much a reality. Through commitment and proper planning, the ideas of today have the opportunity to become the household names of tomorrow. ♦

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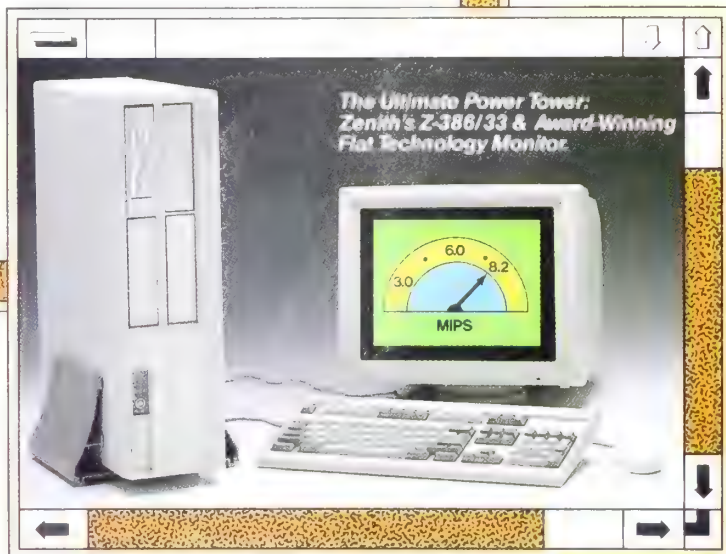
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TAIPEI TAIWAN ROC

SUMMERTIME, AND THE FED MAY KEEP EASING

The economy at midyear is behaving much the way the Federal Reserve Board wants it to. Economic growth continues to cool off as a result of last year's tightening of monetary policy. And fears of recession are receding. The Fed's willingness to loosen up credit in early June relieves some concern that the money managers might overtighten. And another easing move could be on the way this summer.

Right now, short-term interest rates are about one percentage point below the federal funds rate, the Fed-controlled charge on interbank borrowing. If that spread continues, it would justify another move toward ease. The surprising surge in producer prices in May no doubt heightened the Fed's caution about inflation, but the fundamental trend is improving.

Other pressures for additional Fed easing are also building. The dollar has strengthened to levels that raise concern about U.S. competitiveness abroad. With domestic demand slowing, exports are increasingly important to the health of the manufacturing sector—and the economy. Another central-bank effort to push down interest rates would make U.S. financial assets less attractive and thus let some of the air out of the dollar.

In addition to supporting exports, lower rates would cushion the ongoing slowdowns in housing, autos, and consumer spending. Mortgage rates, for example, are at single digits again. And spending for durable goods, where financing is important, accounts for most of the recent slowdown in retail sales.

CONSUMERS TAKE A BIT OF A VACATION The latest numbers on retail sales show that consumers haven't exactly locked away their wallets and cut up their charge cards, but retail business is clear-off. Sales rose a slim 0.1% in May, to \$141.1 billion (part). And although shoppers are paying higher prices for necessities such as food and energy, they seem more resistant to price hikes for discretionary items. The Commerce Dept. revised the April gain in retail sales upward to 1%, from the 0.4% rise originally reported. That means second-quarter sales are off to a decent start compared with the first-quarter average. Even if retail buying is flat in June, sales this quarter would still be up 4%, at an annual rate, compared with last quarter. The problem: Higher prices—not real volume—ac-

count for most of the recent sales gains. Real retail sales, adjusted for prices, have been declining for the past six months. So even after throwing in services, real consumer spending is likely to make only a meager contribution to second-quarter economic growth.

Since December, for example, the dollar value of sales of nondurable goods, some three-fifths of retail buying, has risen by 2.5%. But excluding food and gasoline, where prices have risen rapidly, softgoods sales are down slightly.

Among durable goods, sales of autos remained lackluster in May and early June, and weakness in housing continued to cut into sales at builders' supply and hardware stores. Sales of furniture and appliances, however, still show some strength. Although unchanged in May, they are 4.9% above their December level.

The slowdown in retail sales could mean that consumers are curbing their appetite for credit. Their installment debt rose \$2.7 billion in April, to \$693.8 billion, a healthy gain but smaller than the \$3.7 billion rise in March and the \$5.4 billion increase in February.

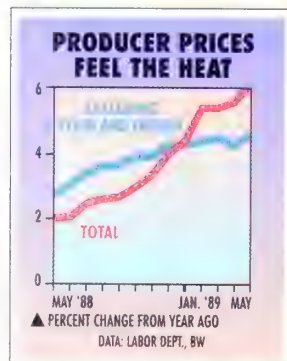
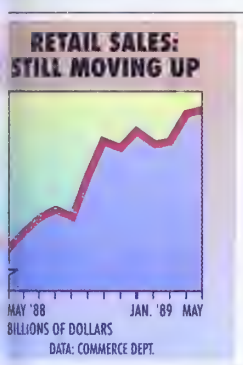
But the real benefit from the softness in consumer spending is that it helps relieve pressure on prices, particularly in the goods-producing sector.

FOOD AND ENERGY COSTS ARE SIZZLING

It didn't look that way in May. Producer prices of finished goods rose a startling 0.9% after more subdued increases of 0.4% in both March and April. But there was less to the May jump than meets the eye. Excluding food and energy, prices rose 0.5% following a 0.1% drop in April. A one-shot rebound in car prices, after heavy discounting in April, was another culprit.

To be sure, inflation in finished-goods prices has accelerated sharply. Big gains in food and energy are mainly responsible, but prices elsewhere have also sped up. Prices of finished goods have risen by 6.2% over the past year. Even excluding food and energy, prices rose 4.5% over the past 12 months, up from just 2.8% during the previous year (chart).

In the second half, rapid price increases in energy products aren't likely to be repeated. That's good, because food prices could be a problem. The Agriculture Dept. has revised its inflation forecast for food prices upward to 5% to 7% in 1989, from 3% to 5%. The project-



Business Outlook

ed 10% drop in this year's winter-wheat harvest is one reason for the more downbeat outlook. The continued shortage of rain in some Midwest farm states such as Kansas and North Dakota is another.

PRESSURES LET UP ON MATERIALS PRICES

But excluding food and energy, change is in the wind. Further back in the production process, pressures on materials prices are easing. May prices for intermediate goods, excluding food and energy, rose just 0.2%, after no change in April. And prices of nonfood, nonenergy crude materials fell 0.4% in May and 1.1% in April.

At both earlier stages, inflation has slowed dramatically. Since November, prices of intermediate materials, excluding food and energy, have risen at an annual rate of 4.5%, down from a 6.8% pace in the previous six months. And over the past year, prices for crude materials, excluding food and energy, have risen 6.6%. Last year at this time, they were soaring at an 18.7% pace.

This price slowdown is partly the result of softer industrial demand, which has freed up capacity. And strong capital investment last year has brought new capacity on line. As a result, the inflation rates for metals, paper, and chemicals, for example, are currently falling.

For now, finished goods prices are still reacting to past increases in materials costs. But with that pressure now waning, the outlook for finished goods prices is improving. In addition, lower prices for manufacturing materials will help offset higher wages, another big source of inflation. Already, the inflation rate for nonfood, nonenergy finished goods seems to be leveling off.

SERVICES TAKE A LEAD IN INVESTING

Businesses are looking toward productivity-enhancing investment in order to contain costs of both materials and labor.

That's particularly evident in the nonmanufacturing sector—mostly services—where productivity

gains have been poor, sending unit labor costs soaring.

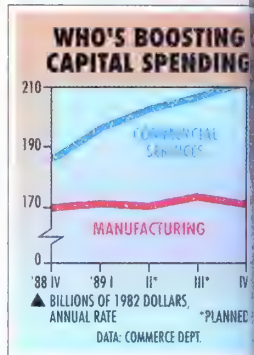
In its latest survey of capital-spending plans, taken in April and May, the Commerce Dept. reported that nonfarm businesses expect to expand their investments in new plants and equipment by 9.9% this year, to \$42 billion, compared with last year's 10.3% advance. Adjusted for prices, the 1989 increase is estimated at 6.5% down from 10.1% in 1988.

That gain isn't much different from the 6.3% increase indicated when the survey was last done in the first quarter, but the timing of the investments has changed. First-half outlays were revised downward, while most spending is expected to take place in this year's last two quarters. That's a big change from the winter survey, which projected an actual decline in second-half outlays. So, capital investment will continue to lift economic growth between now and yearend.

In 1988, manufacturers paced the increase in capital spending with a 12.8% boost in real outlays. This year, however, service companies, faced with rapidly rising wages and the need to raise productivity, are leading the pack (chart).

Factories plan to increase their spending by only 3.6% in 1989. But service industries, such as finance, trade, and communications, expect to invest 10.1% more in new plants and equipment—no letup from last year's 10.2%.

That could bear fruit for the economy later on. Right now, the inflation outlook is especially poor in the service sector because of its growing labor shortage and the upward pressure that places on wages. Capital investment by service industries will increase efficiency and help reduce unit labor costs, taking pressure off inflation. And that could extend the life of the expansion.



THE WEEK AHEAD

FEDERAL BUDGET

Wednesday, June 21, 2 p.m.

Most economists expect that the federal government will post a \$21 billion deficit for May, not much different from the \$22.6 billion deficit of May, 1988. Although tax receipts are running ahead of last year's pace, outlays probably increased as well. In April, the government posted a \$41.4 billion surplus, thanks to a record \$129 billion in revenues. Even so, this year's deficit is expected to be about \$160 billion.

DURABLE GOODS ORDERS

Friday, June 23, 8:30 a.m.

The consensus is that new orders for durable goods were probably up a slight

0.5% in May, after rising 3% in April. The May figure could actually be much higher if the orders for new aircraft announced in April and May show up in the government's May data. Most economists expect hardgoods orders, excluding aircraft, to be unchanged in May, following a 3.6% surge in April.

PERSONAL INCOME

Friday, June 23, 10 a.m.

Personal income probably advanced 0.3% in May, with considerable weakness in wages and salaries. That is suggested by the slight 0.1% increase in nonfarm jobs and the 0.8% drop in average weekly pay. This should be offset by continued growth in interest income. In April, personal income rose 0.4%.

CONSUMER SPENDING

Friday, June 23, 10 a.m.

Consumers probably increased their spending by a modest 0.4% in May. The latest retail sales figures suggest non-durable-goods spending was flat, and nonauto, durable-goods purchases were up by about 0.3%. Auto sales, however, dropped sharply. Service spending continued to grow strongly in May. In April, consumer spending rose a robust 1.1%, thanks to a 13.2% jump in car sales. The expected May increase, after adjusting for price changes, would indicate that real consumer spending should grow at about a 1% annual rate in the second quarter, about the same as the sluggish 1.1% pace of the first.

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REGULATION RISES AGAIN

UNDER BUSH, REAGAN-STYLE LAISSEZ-FAIRE IS OVER

When Ronald Reagan rode into town in 1981, his saddlebags were bursting with proposals to curb the federal government's regulatory reach. Backed by a cadre of anti-regulation zealots, the Gipper succeeded at routing what he saw as a suffocating Washington bureaucracy. His Office of Management & Budget aggressively squelched agencies' proposed rules. Not surprisingly, the number of federal regulators declined 15% during Reagan's first term (chart).

But President Bush's June 12 clean-air initiative makes clear what business lobbyists had long suspected: Under a new, more moderate Administration, the regulatory pendulum is swinging back. Bush has replaced antigovernment crusaders with nonideological problem-solvers. And in a marked shift from his stint as the head of Reagan's deregulatory task force, Bush himself is leading the charge for a clean-air plan that fulfills an oft-repeated campaign pledge.

Many of the Bush folks don't object to using government machinery to tackle festering problems left over from the last Administration. The result: Washington's ever-resilient bureaucracy is shifting out of neutral for the first time in this decade. "In 1981, regulatory reform had a tremendous amount of enthusiasm and support," says Murray Wiedebaum, who chaired Reagan's Council of Economic Advisers. Now, he says, "it has just petered out."

Is this the era of reregulation? Administration officials won't go that far. White House domestic policy aide Roger B. Porter prefers to call the new approach "a regime of regulatory reasonableness."

Whatever you call it, the shift to a more assertive regulatory posture

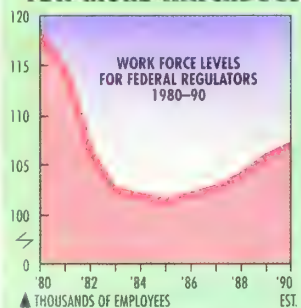
means that business, which basked in eight years of laissez-faire, could be getting the bill soon. Bush's clean-air package, for starters, carries an estimated \$19 billion-a-year price tag (page 60). Business has only to read the President's lips to figure out who'll pay. And corporate lobbyists fear that other expensive rules may follow. For instance, the Administration is weighing plans to promote greater competition in the airline industry, seeking to restrain the freewheeling financial services industry, and starting to clamp down on health and safety problems in the workplace.

Bush's appointees are more interventionist than Reagan's. Consider Treasury Secretary Nicholas F. Brady, one of Bush's closest advisers. While heading Reagan's task force on the October, 1987, stock market crash, Brady called for automatic trading halts to control wild stock swings, and he urged other steps to increase policing of the markets.

Other Bush economic advisers lack the antiregulatory zeal of their immediate predecessors. And regulators freely admit that Reagan-era laxity is giving way to a growing public clamor for a cleaner environment, stricter health and safety rules, and tougher oversight of business. "When you have a cop on the block, no one runs the red light," says Federal Trade Commissioner Andrew J. Strenio. Indeed, Bush's regulatory cops are already starting to blow their whistles in a variety of areas, among them:

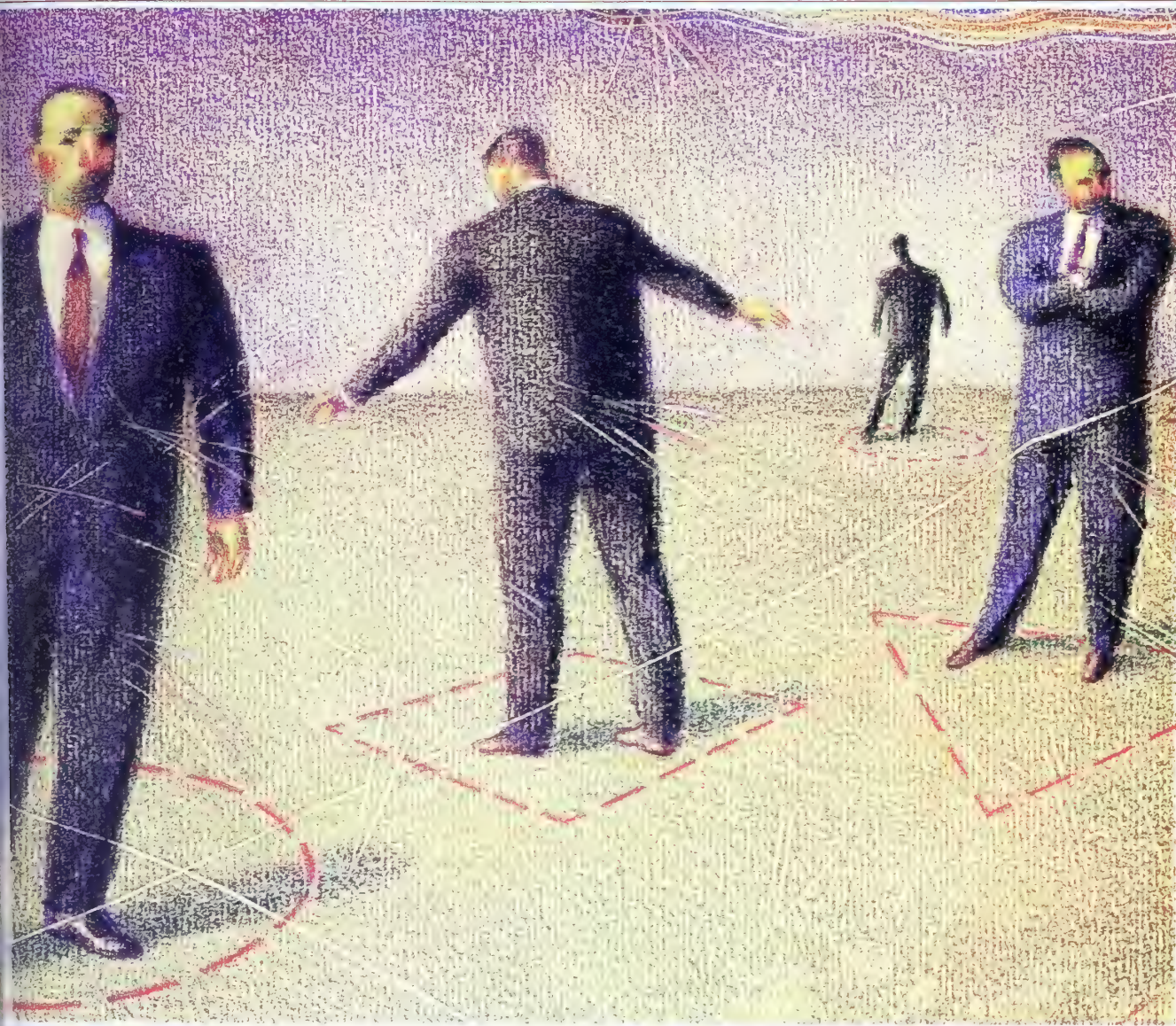
■ **Financial services.** The Administration had little choice but to impose some discipline on the collapsing thrift industry. Bush's \$50 billion proposal to rescue sick savings and loan associations includes stringent oversight and stiff capital requirements. Faced with rising bank fail-

UNCLE SAM HIRES A FEW MORE WATCHDOGS



ures, regulators are giving new bank applications greater scrutiny, checking management backgrounds and business plans as well as capital levels. "Our industry is being buried in new laws and regulations," grouses American Bankers Assn. lobbyist Edward Yingling.

Stung by reports of scandal in the futures pits, the Commodity Futures Trading Commission will soon propose federal registration of traders, a form of licensing. And two years of revelations of stock-market manipulation and rampant insider trading have forced the Securities & Exchange Commission to abandon the hands-off approach favored by former Reagan SEC Chairman J. R. Shad. This spring, when Shearman & Sterling's accounting approach was unveiled, that helped persuade the firm to drop the idea.



utgoing SEC Chairman David S. Rud-
sn't shy about the new activism in
ncial regulation. "The attitude that
market will regulate itself," he says,
nappropriate for the stock market."
long ago that view would have been
ded as heresy.

Environment. In some cases,
ts are forcing Bush's hand. In the
e of such disasters as the Exxon
ez oil spill and publicity about sus-
ed cancer-causing chemicals on fruit,
Administration is cranking up an
arate campaign to sell the clean air
age.

e initiative includes bold proposals
alve acid-rain emissions and to re-
the amount of toxic chemicals
ed into the air by factories. Bush
has endorsed a phaseout of the chlo-
ased compounds that deplete the
osphere's ozone layer. Compared
his predecessor, "this President is
concerned about coming out on the

right side of environmental issues," says
Francis S. Blake, former general counsel
of the Environmental Protection Agency
under Reagan.

■ **Transportation.** Samuel K. Skinner,
the new Transportation Secretary, has
moved quickly to assuage public concern
over air safety (page 126) by requiring
carriers to improve inspection and main-
tenance procedures for aging aircraft.
Skinner also bucked Detroit when he
boosted auto fuel-efficiency standards.
Now he's mulling such options as forc-
ing airlines to divest their computer-res-
ervation systems and break their long-
term gate leases, which give carriers
virtual monopolies at airports.

Even Reagan Administration hold-
overs on the Bush team seem to be pick-
ing up the new activist spirit. At the
Occupational Safety & Health Adminis-
tration, Labor Secretary Elizabeth H.
Dole, who served Reagan as a market-
oriented Transportation Secretary, is

moving ahead on initiatives bottled up
during the Reagan years. One recent ex-
ample: an OSHA proposal that directs
companies to hire monitors to assure ad-
equate ventilation for the 2.1 million
workers who toil in confined spaces.

Even if business could blunt some of
Bush's initiatives, it has to face another
reality: Strong regulatory pressure is
also coming from the Democratic Con-
gress. In addition to toughening Bush's
clean-air campaign, possible measures
include requiring employers to provide
parental leave and reregulation of the
cable television industry.

The pendulum isn't about to swing
back to the 1970s, when regulations
flowed freely from Washington. But to a
business community that sailed through
eight years of Reaganomics, the Bush
Administration's early steps suggest
choppy seas ahead.

*By Tim Smart in Washington, with bu-
reau reports*

A BREATH OF FRESH AIR FROM THE WHITE HOUSE

Environmentalists see hope in Bush's plan—and business is trembling

For President George Bush, it was the domestic equivalent of his stunning proposal to slash conventional troop forces in Europe. On June 12, he issued a bold plan to reduce urban smog, tackle acid rain, and curb cancer-causing pollutants (table). And now, business must brace for sweeping legislation that would cover everything from utility stacks to paint.

Bush's acid-rain proposals in particular represent a virtual revolution in environmental law. They would set tough emission levels but let utilities meet them any way they want, including the purchase of "pollution credits" from companies that cut emissions way below the rule. Some economists think this controversial scheme could improve the cost-effectiveness of pollution spending by letting the market determine the most efficient means of control. "The President has broken the mold," says Fred Krupp, executive director of the Environmental Defense Fund, a pioneer in work on pollution credits. "This approach gets the most environmental protection for every dollar spent."

As flexible and inventive as it is, Bush's approach has plenty of critics. Business worries the price tag will be much higher than the Administration's \$19 billion-a-year estimate. "It's going to impose a hardship," says William D. Fay, executive director of the Clean Air Working Group, the largest lobby on the issue of clean-air laws.

Congress, with the support of environmental groups, is likely to up the ante. Democratic leaders insist that Bush needs to get tougher on smog and toxic air pollutants. His proposal will undergo months of congressional scrutiny and is certain to be strengthened. "Merely setting forth goals is not enough," says Senate Majority Leader George J. Mitchell (D-Me.). "There must be a method of enforcement."

Bush's blueprint would bring sharp reductions in sulfur dioxide and nitrogen oxide—the main culprits in acid rain. Emissions would have to be cut by 29%, or 12 million tons, by 2000. The plan targets the 107 worst-polluting utilities in 18 mostly Midwestern states for the biggest cuts in the first five years.

BUSH'S BID TO CLEAR THE AIR

ACID RAIN Sulfur dioxide emissions are to be slashed 50% by the turn of the century. Under a new scheme, plants that cut their emissions get credits they can sell to polluters, which would not have to reduce their emissions as much. Estimated cost: \$4 billion annually

URBAN SMOG Ground-level ozone would be halved through controls on gasoline emissions. The bill would mandate alternative automotive fuels where smog is worst. Estimated cost: \$3 billion to \$4 billion annually

TOXIC AIR POLLUTANTS Releases of cancer-causing chemicals could be reduced by 75% by forcing factories to use the best available technology. The law would set a schedule for regulating major sources of toxic air pollution within a decade. Estimated cost: \$2 billion a year

DATA: BW



BUSH'S PLAN WOULD COST BUSINESS BILLIONS

But a utility could opt for a number of ways to comply with the law: switch to cleaner natural gas or low-sulfur coal, installing scrubbers, or buying pollution credits. The proposal also embraces clean-coal technology, which processes coal so that it burns more efficiently and pollutes less. The technology is still in the development stage, and Bush would allow companies choosing this option an extra three years to meet emission standards. Electric utilities complain they'll need at least until 2005 to get the new technology up and running.

BLIND MONITORS. However utilities comply, ratepayers in states with the most serious acid-rain pollutants will face 1% to 15% rate hikes over the next few years. An executive of Illinois Power Co., a large user of high-sulfur coal, says complying could cost customers \$2 billion over 30 years.

Environmentalists have other reservations. Under the plan, continuous monitors, which cost about \$30,000 each, would have to be installed on each utility stack. But the Environmental Protection Agency may not have the resources to monitor the monitors. Bush's approach "deserves a hard look," says David Hawkins, senior staff attorney for the Natural Resources Defense Council. But, he adds, "we have questions about its enforceability."

The President's effort to end urban smog and toxic air pollutants takes a more traditional approach, mandating controls and timetables for the auto, chemical and other industries. And it's sparking a more traditional debate. Environmentalists think the proposed tailpipe emission levels aren't strict enough. Auto makers are upset that so much of the plan depends on their manufacturing new cars that burn alternative fuels such as methanol.

Bush wants 1 million of these vehicles on the road by 1997 in nine cities with the worst ozone problems, including Los Angeles, Houston, and New York. Without tax or other incentives, auto company executives wonder how the administration is going to get people to buy more expensive cars that run on more expensive fuel. "The numbers they are saying here are pretty aggressive," says James E. Pasek, manager of federal activities for General Motors Corp.'s environmental activities staff.

The Bush proposal won't go through the legislative process unscathed. But it is widely viewed as an important starting point. And it could break the logjam that has paralyzed clean-air legislation for more than a decade.

By Vicky Cahan in Washington, with David Woodruff in Detroit, James E. Evans in Chicago, and bureau reports

OSTENKOWSKI ADDS A TWIST TO THE TAX TANGO

will consider capital-gains cuts—if Bush permits other hikes

What's behind all the talk in Washington about a revival of President Bush's proposal to tax rates on capital gains? Not what might imagine.

Backers of reduced taxes on gains at heart when House Ways & Means Committee Chairman Dan Rostenkowski (Ill.) dropped a hint that he would give proposal a second look. But he's playing a game aimed at smoking out George Bush on taxes.

Any House Democratic support for capital-gains cuts carries a high price tag: Bush's asking for a hefty package of tax increases. The money would be divided three ways: deficit reduction, funding for some favored Democratic social programs, and financing the gains cut.

Rostenkowski's maneuvering is the latest in the sparring over implementing Bush's April budget agreement with Congress. That deal requires House and Senate tax writers to find at least \$5.3 billion in new revenues. Bush emphasized the deal, but the House's refusal to endorse specific tax cuts has stalled budget progress. The President continues to insist the money should come from the capital-gains tax, which could generate about \$4 billion in 1990.

LIST. Just about everyone accepts the idea that a lower rate on capital gains creates revenues in its first year because it spurs investors to take profits. Congressional Democrats—and most economists—reject the Treasury's claim that a capital-gains cut can produce more money year after year.

Meanwhile, the committees that must translate the spending reductions into law are waiting for Ways & Means to act on tax items. "The source of revenues has always been the issue," says Stanley

E. Collender, a budget specialist with Price Waterhouse. "If they don't move on taxes, nothing else will happen."

While Rostenkowski and Senate Finance Committee Chairman Lloyd Bentsen (D-Tex.) wait for Bush, they've been tossing out little morsels to show the special interests what might be in store, if only the President would agree to a tax bill. On June 13, Finance voted to delay for a year the effective date of

workers. The House tax panel is assembling a package of broad tax breaks for the working poor.

Rostenkowski has also tossed into the pot a measure that ends banks' ability to exclude 50% of the interest they receive on loans to employee stock ownership plans. ESOPs borrow to purchase stock from employers in a technique that is increasingly used by corporate executives to keep shares out of the hands of potential acquirers. Rostenkowski's introduction of the provision has slowed lending to such ESOPs to a trickle—exactly the effect he intended. But Rostenkowski has signaled he would consider ways to restore the tax break for deals that benefit employees, rather than just protect management.

'A GIMMICK.' The fate of all of this legislation is tied to the budget. In a stalemate, everything may die. So Rostenkowski is trying to build up a critical mass of political pressure that will force Bush to accept a modest tax hike.

Capital gains is the biggest chip on the table. One scheme being discussed in Washington would cut the rate on gains to 20% for only a year, then change the system entirely and begin to index gains to inflation. That would assure huge, one-year revenue gains and eliminate the need for any other tax increases in fiscal 1990. But its effect would be to cause massive churning of portfolios without encouraging any new investment. "It's purely a revenue gimmick," says a Bentsen aide.

There's another possibility: Rostenkowski may choose to save the capital-gains card for next year's budget battle. The best guess is that the 1991 deficit will have to be cut by a

steep \$70 billion to hit Gramm-Rudman's \$64 billion target. Senior Hill Republicans have told Bush that such a cut can't conceivably be achieved without a meaningful tax increase.

The President has not yet responded. But Democratic strategists believe that a cut in the capital-gains rate could make it a lot easier for Bush to back away gracefully from his "no new taxes" campaign vow.

By Howard Gleckman in Washington



ON THE TAX MENU

SPENDING AND REVENUE-RAISING CHOICES

CUTTING CAPITAL-GAINS TAXES

NEW FEDERAL TAX CREDITS FOR WORKING POOR PEOPLE

ROLLING BACK PREMIUMS FOR CATASTROPHIC HEALTH CARE

SOFTENING SECTION 89 ANTIDISCRIMINATION RULES FOR EMPLOYEE BENEFITS

REFORMING EMPLOYEE STOCK OWNERSHIP PLANS

RAISING NEW REVENUES TO REDUCE THE BUDGET DEFICIT

DATA: BW

so-called Section 89 antidiscrimination rules for employee fringe benefits—a burning issue for small business. On the same day, a Ways & Means subcommittee voted to extend tax breaks for low-income housing and rehabilitation of historic buildings.

Meanwhile, Rostenkowski and Bentsen are pushing the Democrats' social wish list. The Senate is putting together a bill to provide tax subsidies for child care and health insurance for low-income

TAKEOVERS



HOT PROPERTY: MEDIA MOGULS ARE SALIVATING AT THE PROSPECT OF A BUST-UP SALE

TIME INC. WILL HAVE TO PULL A HOUDINI

One thing's for sure: Shareholders now expect to reap riches

In the executive suites on the 34th floor of the Time & Life Building in New York, the mood is dark. After a week of meetings and late-night strategy sessions, the leaders of America's most prominent publishing and cable-TV company are still struggling to find a way to save themselves from the hostile \$10.7 billion buyout offer from Martin S. Davis, CEO of Paramount Communications Inc. Time's board of directors is preparing its response, which must be made by June 20, three days before Time's scheduled shareholders' meeting. From the outside, the prospects look dim for the company that Henry R. Luce founded in 1922.

Time CEO J. Richard Munro and President Nicholas J. Nicholas Jr. appear to be playing for time. They're furiously probing for legal or financial weaknesses in Davis' bid, which is set to expire on July 5. If Time executives are unable to discredit his offer and end up concluding that the company must be sold, they might be able to cut a deal with a friendly company that can outbid Paramount.

SMART EXPECTATIONS. Yet even with that leeway, it's hard to see how Time will be able to keep intact its stable of magazines, books, cable franchises, and cable programming—plus hang on to its proposed merger with Warner Communications Inc. The company's stockhold-

ers, whose shares were worth about \$125 apiece before Davis stepped in, won't be happy now with anything less than the \$175 he has offered. And they might get even more if there's any truth to rumors that the likes of General Electric Co. might join the fray. Reflecting that, Time's stock has traded over \$182.

Unless the company's directors are willing to risk a pack of lawsuits from aggrieved shareholders, Time will have to find a way to give them pocketloads of cash. That means the company will either have to weigh itself down with debt or sell some control over the company or its assets. Various banks have already given Time a \$5 billion line of credit to play with. Says one media executive who knows Time well: "The problem is that every route they go down takes them right to the place they were running from."

While the picture looks bleak, Time isn't conceding defeat just yet. "There's not a shred of belief that Paramount can take over Time," says one insider. An adviser is said to have told the board, at a six-hour meeting on June 11, that "nobody ever got into trouble for rejecting an offer."

Might Time turn the tables on Davis and make a bid for Paramount? The directors apparently haven't ruled out that possibility, though outsiders take a dim

view of the option. Shareholders would likely sue Time's directors for depressing the price of the company's stock while an all-cash bid is on the table. And Time's motives would be suspect. "The problem is, you have Time saying debt is bad, and for them to go after Paramount only guarantees them managerial survival," says one media executive. A bid for Paramount could cost as much as \$9 billion.

But don't expect Time to raise the white flag and hold an auction just yet. "I don't believe that was proposed" at the board meeting, says director Henry Luce III. If the company were put up for sale, Luce expects that the price would go much higher than \$175. A \$300 offer wouldn't surprise him. The board "knows the value of Time, and \$175 is within hailing distance," says an insider. If the bidding does go higher, Time should be more attractive as a continuing enterprise than as a bust-up payoff. Breakup artists would pay hefty capital gains taxes on the sale of Time's assets, which analysts say are worth about \$200 a share. Company officials insist shareholders would be better served in the long term if they passed up Davis' offer of a guaranteed premium today.

MURDOCH MOVES. Still, lots of media executives are already checking their credit ratings in anticipation that some of the industry's most prestigious assets—from Time, Warner, or Paramount—might soon be up for grabs. Investment bankers say they're sketching out a variety of scenarios, including the possible sale of such famous magazines as *Time*, *People*, and *Sports Illustrated*. "No doubt some British or Australian mogul will come after these magazines," says Jerry Della Femina of ad agency Della Femina, McNamee WCRS. "You can almost see Rupert Murdoch salivating over them, if only to get his picture on the cover of *Time*."

It didn't take long for Della Femina's words to prove prophetic: On June 8, investment bankers at Rothschild & Co. disclosed that Murdoch has retained them to look for opportunities. The previous day, one Murdoch operation announced plans to sell \$287.5 million worth of preferred stock.

Time's shareholders are likely to be up happy with most of the options under discussion. But the prospect of a sale split-up has filled many people at Time Inc. with melancholy. "It's enough to make someone weep," says Andrew Heiskell, who was Time's chairman for 20 years, including 10 years as CEO, before he retired in 1980. "They played their financial game, and it didn't work."

By David Lieberman, with Walecia Rad, in New York

WHY DOESN'T TIME INC. JUST PUT ITSELF ON THE BLOCK?

Here we go again: No sooner had Paramount Communications Inc. chief Martin S. Davis announced his bid for Time Inc. than yet another unseemly and expensive takeover battle was under way.

Within hours, Time Chairman J. Richard Munro fired off a scorching letter to Davis, recalling the history of his company—the former Gulf & Western Inc.—as “engulf and devour.” Warner Communications Inc. Chairman Steven J. Ross, Time’s merger partner, then sued Citibank, Paramount’s financier, for violating an alleged pact not to interfere with a Warner deal. Meanwhile, Davis challenged Munro to put the interests of Time’s shareholders first.

Through it all, Time’s investment bankers and lawyers hurried to preserve the merger. Munro and Ross had crafted in March. Their meters ticked away, running up millions of dollars in fees. And with other potential bidders circling, the battle could get even nastier and more costly. Isn’t there a better way? Yes, indeed. Time could simply put itself on the auction block. Taking that step now could save its shareholders a lot of money—and get them the best offer. And it might spare the business world another embarrassing spectacle.

POWER SHIFT. Time executives argue that the company is not for sale and that their deal with Warner would be a merger of equals. But several of its elements indicate otherwise. If the deal succeeds, Warner shareholders would own 60% of the new company’s stock, which itself would be a change in control. Also, “the combined company is a different economic entity with a different board and different management,” says Harvey J. Goldmid of Columbia University Law School. He says this change in Time’s nature “means they have gone a wayward putting the company up for sale.” Recent court rulings agree—much as one implying that a management restructuring of Interco Inc. was equivalent to a change in control.

Surely, that’s how Wall Street sees Time’s situation. After Davis made his bid on June 6, rumors were rife that

anything could happen—that Time, Paramount, or Warner might be bought. On June 7, all three stocks advanced. But since then, only Time’s price has continued its upward march. It has been trading above Paramount’s \$175-per-share offer. While Time might still bid for Warner or make a Pac-Man offer for Paramount, nearly everyone sees Time as the object of desire.

Plus, it’s far too late for Time to call off its deal with Warner and “just say no” to any takeover. Paramount’s cash offer, at a 38% premium over Time’s June 6 closing price of \$126 a share, scotches that. Time’s advisers would be hard-pressed to prove that Time management could get the company’s stock

an unwieldy management structure that keeps Munro and Ross as co-chief executives, with the post eventually going to Time President Nicholas J. Nicholas Jr. And it contains a stock swap that makes it very hard for outside offers to succeed. With those features, it’s easy to construe the deal as a “management-sponsored” transaction—one in which management has a personal stake in the outcome.

HIGHER STANDARD. If the courts agree, Time’s outside directors—who include such notables as retired IBM Chairman John R. Opel, Xerox Chairman David T. Kearns, and R. H. Macy Chairman Edward S. Finkelstein—would no longer be shielded by the business-judgment rule, which grants wide latitude in decision-making. A court would hold them to a higher standard: They would have to show that they created a level playing field for all bidders, studied all proposals carefully, and chose the best one for shareholders.

But why wait? An auction now might save Time shareholders a bundle. When renowned takeover lawyer Martin Lipton advised Kraft Inc. in its defense against Philip Morris Cos. last fall, he charged \$12 million for two weeks of work—even though Kraft eventually agreed to the bid. Irving Trust Co. paid its law firms an estimated \$30 million in fees during its 15-month battle to remain independent of the Bank of New York—and it, too, failed. In the free-for-all for RJR Nabisco Inc., investment-banking fees alone topped \$200 million.

To be sure, auctions have their own problems—how to cut them off, for example. But they do put all bidders on an equal footing. And they are, usually, the best way to ensure the best deal for shareholders.

In all likelihood, that’s what Time’s directors will decide. As in all mega-deals, the glare of publicity will ensure that the process works. By acting now, Time’s directors can set standards for the hundreds of smaller deals that won’t come under such scrutiny. That would be an important step toward cleaning up the messy and wasteful process that takeovers have become.



to that level anytime soon. Besides, Munro was already taking much less than \$175 a share with the Warner deal. Additional offers would make this choice even harder to defend.

Legal experts say that Time is, as yet, probably under no clear legal obligation to put itself on the block. But neither was NWA Inc. when, in the face of competing bids, it decided in May to appoint a special committee of outside directors to review all proposals. It must be dawning on Time’s management and board that the company is very close to, if not over, that line.

The nature of the Time-Warner deal also suggests that, in the wake of the Paramount offer, it’s time for an auction. The proposed merger hinges on

TAKEOVERS

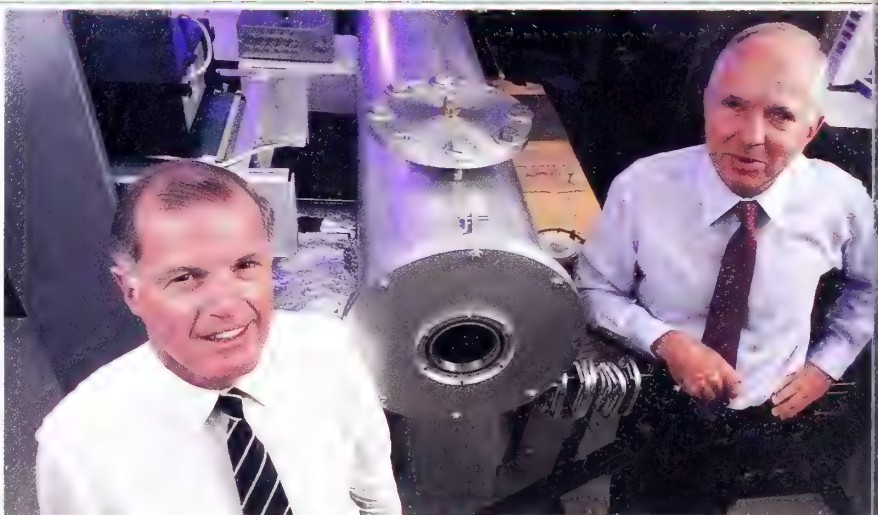
'PULSE POWER' FUELS A BID

Jaycor wants Maxwell Labs' futuristic weapons technology

In sunny San Diego, not far from where children pet the dolphins at Sea World, a clutch of tiny companies is studying the end of the world. Companies you probably never heard of, such as Jaycor, and some a bit better known, such as Maxwell Laboratories Inc., get millions to help the Pentagon figure out how to survive a nuclear attack. They're also scurrying to build weapons using laser beams and monster pulses of electrical power to hit targets on Earth and in the heavens.

This deadly research has always been important to the military. Now, Wall Street has taken notice. On June 9, Maxwell Labs rejected a \$17-a-share, \$44 million unsolicited bid by Jaycor and its physicist chairman, James A. Young.

Young, whose Jaycor earned \$1.2 million on \$66 million in revenues last year, has been eyeing Maxwell for more than a decade. Vernon H. Blackman, vice-president of Jaycor, helped raise more



JAYCOR'S YOUNG AND BLACKMAN: EYEING MAXWELL FOR OVER A DECADE

the technology for conventional warfare.

Jaycor obviously sees Maxwell's potential. With earnings of \$2.4 million on \$48 million in revenues for the nine months ended on Apr. 30, Maxwell has a backlog of \$133 million in research contracts (chart). While most of that comes from the government, Maxwell is looking increasingly to the private sector. Last year, it bought a company that does submicron computer-chip research and secured a \$20 million contract from Louisiana State University to develop the technology using pulse power. Maxwell also has \$6 million in funding from three big food companies to study pulse-power applications in food processing.

'MORE VIRILE.' Young and Blackman are hardly strangers to Maxwell or to its chairman, Alan C. Kolb. In the 1960s, Young headed a research unit of what's now the Defense Nuclear Agency, where he reviewed work Kolb did for

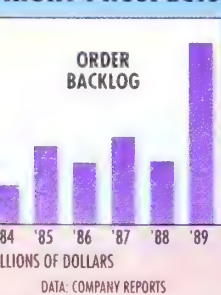
the Naval Research Laboratory. In the 1970s, Blackman was president of S-Cubed, a San Diego research lab that Maxwell acquired in 1984.

Kolb is showing no warmth toward his old colleague's overture, however. He says he intends to keep the company independent. Even if he did sell, he claims that Jaycor's offer is too low.

But now that Jaycor has moved, other suitors might be tempted to look at Maxwell's relatively debt-free balance sheet. Samuel H. Husbands, a Dean Witter Reynolds Inc. broker whose clients had close to 5% of Maxwell, values the company at \$27 a share. But \$17 may not be Jaycor's final offer. "The price is something that we could negotiate," Young says. For a man whose idea of fun is hiking up a mountain and jumping off a cliff with a parachute, he might find the takeover game has whole new thrills.

By Eric Schine in Los Angeles

MAXWELL LABS: BRIGHT PROSPECTS



than \$200,000 to start up Maxwell in 1965 and sat on its board for six years.

POWER FOOD. What does Jaycor see in Maxwell that has eluded others, who traded the stock at no more than Maxwell's \$14.25-a-share book value when Jaycor bid \$17? For one, Jaycor covets Maxwell's expertise in simulating nuclear radiation. That fits with Jaycor's unit that helps the U.S. military study how to protect itself during nuclear warfare. But the real prize is Maxwell's know-how in "pulse power," which can turn bursts of stored energy into a weapon that can pierce the thickest tank armor.

It was that technology that brought Maxwell to national attention in 1986, when it showed off a gun that could shoot a plastic cube 3,000 miles an hour through half-inch-thick metal. The U.S. government awarded Maxwell contracts to incorporate pulse power into its Star Wars defense system. But now, with SDI funding in doubt, Maxwell is developing

TAKEOVERS

WITH ALL THESE BUYERS, AMI MUST BE GETTING BETTER

After years of falling margins, the hospital chain is a hot buyout target

If anyone doubts that the worst is over for health care companies, just take a look at American Medical International Inc. After three years of crushing debt and falling operating margins, the Beverly Hills-based hospital chain is now a hot item. Since early June, it has received two hefty takeover bids. And analysts say more could be on the way, including one from a group headed by Fort Worth billionaire Sid Bass. The Bass-led RTF Partners already owns at least 11.6% of AMI.

The fun started in March, when AMI board announced a restructuring plan valued at up to \$1.9 billion that would include a onetime dividend to shareholders. At the same time, the board said it would consider other offers. On June 1, leveraged buyout specialist Clayton Dubilier joined with AMI board member M. Lee Pearce and two former company executives to offer \$24 a share for the company, or \$1.6 billion. Three days later, investment banker Brian M. Freeman stepped in, saying he would create

employee stock ownership plan to bid a share, or \$1.8 billion.

Why all the fuss over a company that last year showed a meager \$153.9 million operating earnings on revenues of \$1 billion and whose operating profits fell off by 60%, to \$29.7 million, so far this year? For one thing, the company lost \$109 million in cash after selling off some of its 104 hospitals in the past year. And some of the remaining hospitals sit on some choice real estate. But more important, AMI has cut 300 of its 2,000 corporate headquarters jobs and pared back to focus on high-end specialties such as obstetrics in profitable big-city hospitals. All of this comes as analysts predict that revenues of hospital chains, after declining by as much as 10% during the past six years, could creep back to a 5% gain this year.

AMI still has a lot of work to do. Chairman Richard A. Gilleland, recruited earlier this year by the Bass group after leaving around pacemaker manufacturer Intermedics Inc., intends to slash costs further and will sell more hospitals. That will help the company whittle down the \$1.3 billion in debt that results from a buying spree in the early 1980s. The company's stock, which had been trading as low as 11 late last year, rebounded to 18 when AMI announced its restructuring plan in March.

PEP OUT. Bidders have until June 29 to make an offer. The Bass group, which includes financier Richard E. Rainwater, former Electronic Data Systems Co-Chairman Morton H. Meyer, has received Federal Trade Commission approval to increase its stake to 15%. At one point, LBO firm Kohl-Kravis Roberts & Co. was said also to be interested. The bidding, says analyst Steven Reid of L. H. Friend, Wein- & Frankson Inc., could go up to \$30 a share, or about \$2.1 billion.

Meanwhile, a Miami physician who has been agitating for greater efforts to improve margins, has been camped out for at the Four Seasons hotel in Beverly Hills. At a special board meeting on June 12, he pleaded the case for his offer. Freeman, known for his recent efforts to broker a labor role in a deal for Eastern Air Lines Inc., is still trying to line up his financing. Neither would comment on his next steps. The unlikely winner in all of this may be Gilleland, who is highly regarded by the suitors and would probably be on to run the show. "I'm just looking for a business partner who has a clear vision for the company which is consistent with mine," he says. No. But right now, the activity is focused on a different kind of vision: a company that seems to be attractive lot of well-wishers.

By Patrick E. Cole in Los Angeles

PERSONAL COMPUTERS

FROM BOOM BOXES TO BARGAIN-BASEMENT PCs

Emerson takes aim at the \$11 billion home-office market

Two executives at Emerson Radio Corp., personal computers now are as much a consumer electronics product as, well, radios. The company, which has made its fortune largely by slapping its name on low-priced, Asian-made boom boxes and TVs, recently unveiled a line of IBM-compatible PCs at the Chicago Consumer Electronics Show. It plans to sell the computers, with suggested retail prices of \$999 to \$1,899, in discount stores, catalog showrooms, and consumer electronics chains. Says Christopher J. Daly, president of the new Emerson Technologies subsidiary in Van Nuys, Calif.: "Computers have finally become a commodity product, so they lend themselves to our distribution."

Emerson isn't the only company to reach that conclusion. North American Philips recently began hawking a Magnavox line of personal computers to K mart Corp. and other mass merchants. And IBM, whose PCjr bombed a few years ago, may take another run at the market. Even Nintendo Co. is exploring ways of turning video-game fans into home-computer hackers. The new players are joining Blue Chip, Epson, Packard Bell, and Headstart Technologies, now owned by Philips.

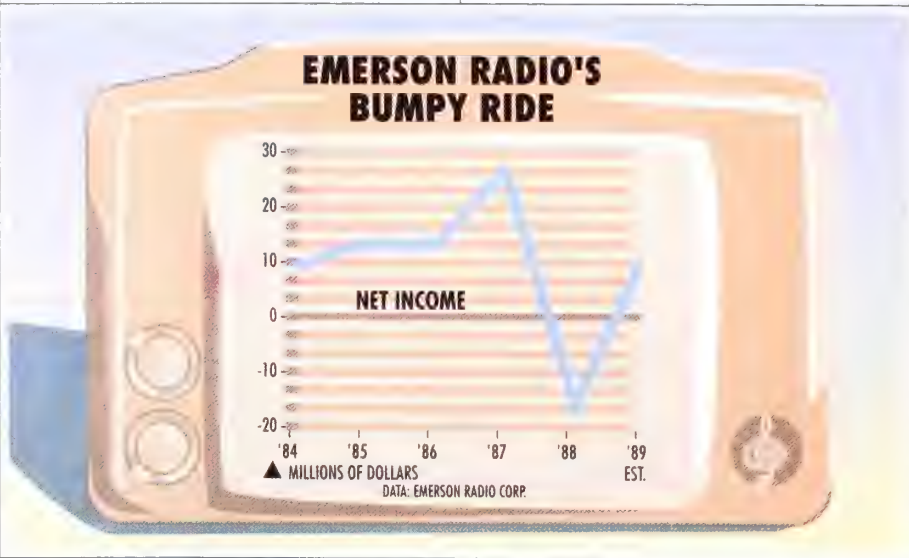
SHORT MEMORIES. Stores, too, are going gaga over computers. Best Buy Co., a consumer electronics chain based in Bloomington, Minn., began selling PCs in its 41 stores in October. Sales have boomed, says Marketing Vice-President Lee Schoenfeld. "We're thinking of doubling the space devoted to computers."

The growing interest in inexpensive PCs is reminiscent of the early 1980s, when the Commodore 64, Coleco Industries Inc.'s Adam, and similar machines caught the fancy of both retailers and consumers. The infatuation faded fast when the average buyer found the machines weren't good for much more than playing electronic games. Some stores took a bath in unsold inventory.

Emerson and others insist things will be different this time. That's because the target is the \$11 billion home-office market, where equipment sales have been bounding ahead at about 12% a year since 1987—twice as fast as sales of TVs and other traditional goods, estimates market researcher BIS CAP International. Homes and small businesses this year will buy about 2 million PCs, 25% more than in 1988. "Home office is the only growth area," notes Frank Bisceglia, senior vice-president for merchandising for Nashville-based Service Merchandise Co.'s 324 catalog showrooms.

But does that mean Emerson Radio can really become Emerson Computer? Computer technology, unlike that of radios and VCRs, is still evolving rapidly, and the machines will demand more investment and support than Emerson's current products. Says Emerson Chairman William Lane: "Our commitment is to develop new technology, not just put products on the shelf."

With computers, Emerson also plans to dive back into manufacturing. It is now a classic hollow corporation—a designer and marketer that hires mostly



Top of the News

offshore producers to make its goods. This has paid off in sales, but profits have been erratic (chart, page 65). In the year ended on Mar. 31, Emerson netted just \$10 million on sales of \$761 million.

Emerson's ace in the hole with PC buyers is its brand name, Lane figures. Retailers seem to agree. Fretter Inc., a Livonia (Mich.)-based chain of 54 consumer electronics stores, is negotiating an order, and Service Merchandise and Best

Buy may soon pick up the new computer line, too. But rivals scoff. "Emerson stands about as much chance of success as a computer company would have putting its name on a TV," says Headstart President Harry Fox. But it's not competitors Emerson has to satisfy. After their first, painful experience with low-cost home computing, consumers may think twice before buying the new PCs.

By Lois Therrien in Chicago

AUTOS



THE \$13,800 MIATA IS ALREADY BEING HAILED AS ONE OF THE WORLD'S BEST CARS

MAZDA ROLLS OUT A POOR MAN'S MASERATI

The carmaker tries to carve out a sporty image with its new Miata

It's a throwback to the glory days of the British roadster, a time when cars were simple and pure, and their owners tooted and waved whenever they passed a kindred Triumph or MG. They were fun to drive and the dickens to repair. But this is no bucket of bolts: The Mazda MX-5 Miata that will make its debut on July 1 is modern technology masquerading as a classic, lightweight roadster. Only \$13,800, and a convertible to boot.

But for Mazda, it's more than just a hot little car. It signals the beginning of an attempt to carve out a distinct image for itself in the increasingly cluttered U.S. car market. "Our problem in the U.S. today is not that Mazda has a neg-

ative image but a neutral image," says George J. McCabe, group vice-president for marketing and sales at Mazda Motors of America Inc. That's the result of Mazda's strategy during much of the 1980s, when the company simply positioned itself as a lower-priced Japanese alternative to Honda and Toyota.

'JAPANESE BMW.' Now, Mazda plans to capitalize on the sporty aura it enjoys among car enthusiasts thanks to its RX-7, the world's best-selling two-seater. "It's almost a Japanese BMW," says Christopher W. Cedergren, senior analyst at J.D. Power & Associates. With the Miata, the company hopes to spread that high-performance image to the masses. Miata ads start airing next

month, but the full campaign that will launch Mazda's new image is under tight wraps until mid-August. To push a line of vehicles that now runs from \$6,500 economy 323s to \$23,000 premium sedans, it's likely to stress feelings of features, performance over price.

That strategy makes sense in the tight jam of the U.S. auto market, Cedergren says. As carmakers move toward parity in quality, pricing, and styling, "the only thing that's going to matter is image," he says. Mazda will spend an estimated \$140 million on national advertising the coming model year, 36% more than spent last year.

The company's limited sales in the U.S., now about 2.5% of the market, have long kept the brakes on Mazda's image-building. In the 1970s, the gas-guzzling earlier version of the rotary engine that powers the RX-7 almost brought the company down. Sales just begun to recover in 1981, when the U.S. slapped Japanese carmakers with quotas based on previous sales. Today, with annual unit sales of 350,000 in the U.S. market, Mazda ranks a distant fourth among Japanese brands here, after Honda, Toyota, and Nissan.

CALIFORNIA STYLE. The company began making changes a year ago, when it merged its three U.S. regional distribution arms into a single sales company. Then, the new U.S. company's management added an in-house ad department, shook up its outside agency, and replaced longtime spokesman James Garnett with voice-overs. This spring, even Garnett's voice was replaced. "Jim got lots of recognition, but the cars were getting so behind him," says Janet M. Thompson, Mazda's advertising vice-president.

Mazda's new look will also reflect an overhaul of its product-design strategy. "The time has passed when you could bring in a Japanese product adapted to this market," McCabe says. "It's got to be designed to meet the wants and needs of the American buyer." The Miata was conceived and styled in Southern California and engineered and built in Japan. It will not even be introduced to the Japanese market until later in the year.

Mazda's projections for the roadster are modest—only 40,000 units in the first year—but "we feel it's a good 'request' car," Mazda's Thompson says. "It'll bring them into the showroom. There's no question that it's already a hot car. Even before the Miata goes on sale, the current issue of *Road & Track* is calling it one of the world's five best cars. The only one that bested the Miata was the Ferrari Testarossa—10 times Mazda's price, at a cool \$140,000.

By Larry Armstrong in Irvine, Calif.

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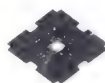
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HEALTH CARE FOR ALL OR AN EXCUSE FOR CUTBACKS?

An Oregon plan would cover basics but trim overall medicaid coverage

Two years ago, a national TV audience was gripped by the plight of Coby Howard, a seven-year-old leukemia victim from Oregon. His family couldn't afford the bone-marrow transplant that might have saved his life. When the boy died, many blamed the Oregon legislature, which a few months earlier had voted to stop spending medicaid funds on costly transplants that benefit relatively few patients. Instead, it voted to use the money to help thousands of poor, pregnant women get health care. The episode earned John A. Kitzhaber, a physician, Oregon Senate president, and author of the medicaid measure, a reputation as the prophet of a new era of health care rationing—along with the sobriquet "Dr. Death."

That label hasn't stopped Kitzhaber from taking his ideas a step further. He's behind another bill, expected to be passed by the Oregon House shortly, that would provide basic health care to every poor person in the state. It would do so by imposing new limits on benefits under medicaid, the federal-state program that provides health coverage for the poor. The bill, which the state Senate passed in May, aims to rank all medicaid treatments in order of importance—with the state covering only those at the top of the list (table).

PRIORITIES. The ranking system, say the bill's backers, will allow medicaid funds to cover most of the state's 400,000 uninsured. A companion bill would require employers to provide the same basic coverage to the rest of the medically uninsured. "They may not all eat steak," Kitzhaber says, "but they all will eat."

Nobody likes doling out health care and making life-and-death decisions about who gets it. But as the ranks of the uninsured rise and soaring costs press medicaid budgets, other states may follow Oregon's lead. In Colorado,

where medicaid rolls have swelled by 28% in four years, the legislature has told its state medicaid office to develop a priority list. A Kentucky foundation is working up a list of recommended basic services for 650,000 medically indigent. Alameda County in northern California is considering a treatment ranking system to serve more of its poor. "We're struggling with the fact that we have unlimited expectations and very limited dollars," says David J. Kears, director of Alameda's Health Care Services Agency.

A number of ethicists and health experts are disturbed by such plans. They argue that state and federal governments could afford more generous care for the poor by raising taxes or allocating resources differently. "To withhold proven, efficacious treatment from someone who needs it does not seem ethical," says Arthur L. Caplan, director of the University of Minnesota's Center

for Biomedical Ethics. Some critics would rather push doctors to reduce what studies say are large numbers of unnecessary hysterectomies, Caesarean sections, and other procedures.

Backers of the Oregon approach contend that the ethicists overlook a basic point: States are already rationing care—arbitrarily. They deny care when funds run low by kicking people off the medicaid rolls. In many states, doctors refuse treatment to medicaid beneficiaries because government reimbursements are lower than private insurance. Most states restrict reimbursements for some services, but not according to consistent public-health

considerations: They may limit hospital stays, say, but allow podiatric care. "Oregon is trying to say, 'Let's ration rationally,'" says former Colorado Governor Richard D. Lamm, now at the University of Denver.

MODEL PLAN? In Oregon, a commission would be set up under the pending bill to develop the priority list. A preliminary study by a group of Oregon doctors, ethicists, and community leaders provided the model. The group

ranked medical procedures by cost, saving potential, and the degree to which they improve a patient's quality of life. They also looked at whether each low-cost intervention can head off an expensive crisis later. Thus, they decided that care for a pregnant woman who weighed a child's liver transplant. "Vital \$500 worth of prenatal care, you can avoid problems of low-birthweight babies that can cost \$20,000," argues Kenneth M. Rutledge, president of the Oregon Association of Hospitals.

The Oregon experiment is being watched nationwide. In one view, the state's attempt to provide basic health coverage to its entire population could serve as a model for an eventual national health care plan. Others fear that private insurers may one day seize on the Oregon plan to curtail coverage sharply. With the government and private employers unwilling to spend unlimited sums on health care, the tough choices Oregon has already made will be hard for the rest of the country to avoid.

By Susan B. Garland in Washington with Barbara Buell in San Francisco for the bureau reports



KITZHABER: CRITICS CALL HIM "DR. DEATH"

MEDICAL SERVICES OREGON MAY PAY FOR...

- ▶ Family planning, prenatal care, immunizations, nutritional supplements, treatment of acute illnesses
- ▶ Preventive dentistry for children, eye and hearing exams for children and the elderly, physical therapy
- ▶ Routine dental care for the elderly, dentures, Pap smears

...AND THOSE THAT MAY BE CUT

- ▶ Alcohol and drug abuse education, foot care for the elderly
- ▶ Eye and hearing examinations for non-elderly adults, education programs on suicide prevention
- ▶ Routine dental care for nonelderly adults, programs for eating disorders
- ▶ Organ transplants, cosmetic surgery

DATA: BIOETHICS CONSULTATION GROUP INC.

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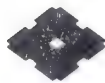
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In Business This Week

EDITED BY HARRIS COLLINGWOOD

SAATCHI DECIDES TO STICK TO ITS KNITTING

► Highflier Saatchi & Saatchi came down to earth with a thud on June 13, when it announced its results for the half-year ended on Mar. 31. Spurred by a 57% fall in pre-tax profits, to \$35 million, on a sales rise of 12%, to \$686 million, the London-based advertising and consulting giant is bent on downsizing.

Saatchi is hacking away at costs and reorganizing its advertising management. More significant, it's abandoning plans to become the world leader in consulting. On the block is management consultant Hay Group, bought in 1984. Saatchi will regroup around its ad agencies, which are showing some vigor: Its U.S. unit, Saatchi & Saatchi Advertising, has pulled in \$200 million in new accounts this year, including Burger King.

THE S&L CRISIS KEEPS GETTING WORSE

► The June 13 release of the thrift industry's first-quarter earnings forcefully reminded Congress that the savings and loan crisis is worsening daily. As lawmakers deliberated over the Bush Administration's \$50 billion S&L rescue package, they learned that the industry lost \$3.4 billion in the first three months of 1989, up from the \$3.2 billion of red ink in the fourth quarter. Banks, which are subject to stricter regulation than thrifts, posted a record \$7.3 billion in profits, up from \$4.9 billion in the previous quarter.

THE PENTAGON TUNES INTO HDTV RESEARCH

► High-definition TV is supposed to boost the U.S. electronics and semiconductor industries back into the world market—with help from Uncle Sam. On June 13, the Defense Dept. took the first

step, awarding contracts to five companies to develop HDTV screens for consumer and military applications.

The companies are NewCo of San Jose, Calif.; Texas Instruments; Projectavision in New York; Photonics Technology of Northwood, Ohio; and Raychem of Menlo Park, Calif. "It's a step in the right direction," says Richard Iverson, president of the American Electronics Assn. "But there needs to be additional money to fund the development program."

THE VERDICT IS IN ON PAUL BILZERIAN

► It took Paul Bilzerian years to win credibility as a corporate raider but only eight hours for a federal jury in New York to convict the Singer chairman of securities and tax fraud and other charges. The government won its first trial conviction against a prominent Wall Streeter and its first jury finding that stock "parking" is a crime, not just a civil offense. The June 8 verdict is certain to buoy prosecutors in the upcoming trials of such prominent Wall Streeters as arbitrageur Salim Lewis, junk-bond mogul Michael Milken, and trader John Mulheren, who on June 14 was indicted for securities-law violations.

Jurors said Bilzerian's own testimony ultimately did him

A GREAT LEAP FOR MUFFINKIND?

A state bird, state flower, even a state fossil (the trilobite)—Wisconsin has 'em all. But alas, it has no state muffin. Eight state senators are seeking to remedy that deficiency by according the honor to the cranberry muffin. Cranberries are the dairy state's largest fruit crop.

The idea first took root among second-graders at the Washington Elementary School of Merrill, a cranberry-rich area in the north-central part of the state. But despite backing from Ocean Spray and the Wisconsin State Cranberry Growers Assn., the bill flopped last year. Adding to the indignity, State Senator Mordecai Lee (D-Madison) even suggested an alternative—the Egg McMuffin.

At least the cranberry isn't competing against another fruit for the right to be the jewel in the muffin. Last year, when Wisconsin chose a state beverage, it was beer vs. milk. The legislators swallowed hard—and voted for milk.



in. Bilzerian, 38, faces up to 45 years in jail and \$2.25 million in fines. His sentencing is set for Aug. 16, after which he plans to appeal.

ASHTON-TATE'S NASTY SURPRISE

► Ashton-Tate, the No. 3 microcomputer software developer, knew its second-quarter earnings were going to drop below last year's level. But on June 13, the Torrance (Calif.) company announced that things were much worse than expected: It foresees a \$15 million loss for the June quarter. The company warns that the September quarter might

wind up in the red, too.

The company got a shock on June 12, when wholesalers indicated that they were holding alarmingly high levels of Ashton-Tate software, says Smith Barney analyst Tom Galvin. The news isn't likely to improve until Ashton-Tate ships an upgraded version of its dBase IV program, probably in the third quarter.

KRAFT IS THE BIG LOSER IN THIS CONTEST

► Those cheese whizzes at Kraft General Foods Group are none too cheerful these days. Because of a printing error in Sunday newspaper inserts in Chicago and Houston, the company's contest to promote its Kraft Singles cheese made virtually every player a winner. More than a hundred Chicago-area Singles buyers apparently won the grand prize, a \$17,000 Dodge Caravan, while scores of others won bikes and other freebies.

Kraft says it has voided the contest but may award consolation prizes. But some disappointed winners are in no mood to be consoled: Lawyers for more than 100 players have filed two class actions charging Kraft with violating its contract with customer



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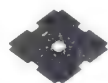
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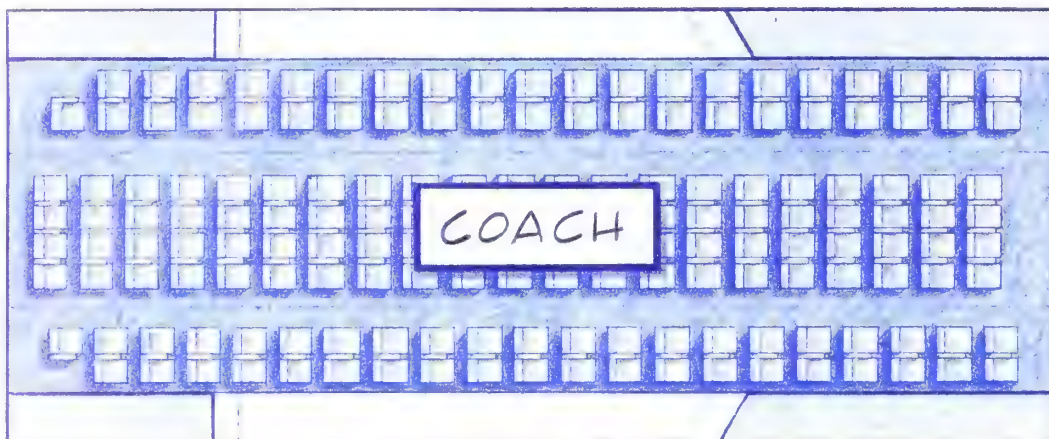
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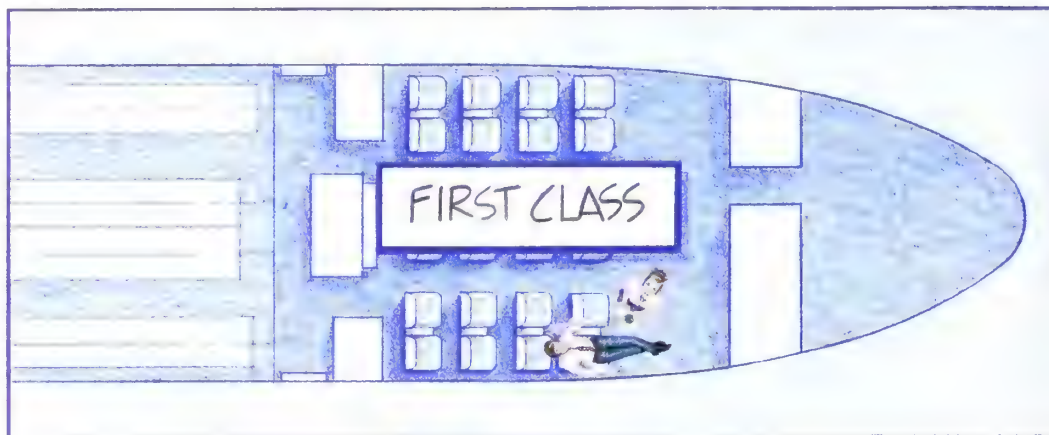
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CONTINENTAL

WILL ALFRED SIKES FIX THE POWER SHORTAGE AT THE FCC?

In the five years since the breakup of the Bell system, Congress has grown increasingly restive about federal Judge Harold H. Greene's role as the stern patriarch of the nation's telephone network. But Democratic lawmakers have been unwilling to transfer the judge's powers to the Federal Communications Commission as long as it was in the hands of hard deregulators. Their reluctance could end if, as expected, President Bush appoints Assistant Commerce Secretary C. Sikes as his FCC chairman.

In the central issues of telephone regulation, Sikes, who has headed the National Telecommunications & Information Administration since 1986, shouldn't differ much from former FCC chiefs Dennis R. Patrick and Mark S. Fowler. At the NTIA, Sikes complained that Greene's restrictions on resale telephone companies threatened to leave the U.S. with a "second-class" phone system. Sikes favors letting the Baby Bells move into manufacturing and information services.

Why might Congress be willing to give an agent headed by Sikes a longer leash? Because the 50-year-old lawyer lacks the free-market fervor of his hardline regulators—and he may be willing to yield on some summer issues of burning interest to key lawmakers.

WIND PLEASER? Sikes, siding with many Democrats, thinks extra steps may be needed to rein in the commercialization of children's TV. Last year, Representative Edward J. Markey (Mass.), chairman of a House Telecommunications subcommittee, won passage of a bill limiting advertisements on kids' TV. President Reagan vetoed the measure at the urging of Chief Justice William Rehnquist. Sikes's less doctrinaire approach would win him favor with both Markey and Senate Commerce Committee Chairman Ernest F. Hollings (D-S.C.).

Sikes's FCC outraged Congress by refusing to regulate the exorbitant long-distance rates charged to callers of payphones in hotels and other public places. Sikes is unhappy about the fees charged for these "alternative operator services." And as head of the NTIA, he pushed hard to open the

British and West German markets to U.S. telecommunications equipment and for government to set an American standard for high-definition TV. This is sure to please trade hawks.

Such stands could inspire Congress to do what many observers have long advocated: replace Judge Greene's autocracy with a larger role for the FCC. "Sikes could restore institutional confidence in the agency," says one Republican House staffer. "We could see a very serious effort to return jurisdiction to the FCC."



SIKES: LESS DOCTRINAIRE

If Sikes gets the nod, the Missouri-born former radio station owner should be confirmed easily. His association with Senator John Danforth (R-Mo.), the ranking GOP member of the Commerce Committee, and his low-key style should make for smooth sailing through the Senate.

TOUGH ISSUES. That doesn't mean there wouldn't be some static in Sikes's relationship with the Hill, however. Lobbyists for the publishing and cable TV industries will seek to keep phone companies out of the information business. Sikes would be likely to clash with Hollings over the South Carolinian's pet cause: restoration of the fairness

doctrine, which required broadcasters to provide evenhanded treatment of controversial issues. Patrick's FCC repealed the doctrine, and a bill restoring it was vetoed by Reagan.

Another tough issue will be cable TV regulation. Under the 1984 Cable Act, the chairman of the FCC must report to Congress next year on the deregulated industry. Many legislators are furious about big hikes in subscription fees. Sikes, who says the system of municipal franchises is "constitutionally questionable," may look for ways to boost competition—but he's unlikely to back wholesale reregulation.

But for most of the industry, a normal give-and-take between Congress and the FCC would be welcome after the gridlock of the Reagan era. Just getting the Hill and the agency speaking again might clear the air—and pave the way for ending Judge Greene's grip on the phone business.

By Dean Foust with Seth Payne

ITAL WRAPUP

GOVERNORS

Democratic Lieutenant Governor L. Douglas Wilder was the big winner in Virginia's bloody June 13 gubernatorial primary. Former Attorney General Marshall Coleman edged out his GOP rivals, onetime Senator Paul S. Trible Jr. and Representative Stan Parris, but was badly beaten in a slugfest that should provide plenty of fodder for the Democrats. The big question for Wilder: whether Old Dominion is ready to become the first state since Reconstruction to elect a black governor. The stakes are high. Virginia is expected to gain an additional House seat in the 1990 reapportionment.

With the Democrats holding a lock on both houses of Virginia's legislature, control of the statehouse is the only way the GOP can expect a favorable outcome in redistricting.

THE NATIONAL DEBT

The days before Congress' August recess are shaping up as the time for the annual debt-ceiling crisis. Current estimates have the Treasury exhausting its \$2.8 trillion in borrowing authority in late August. But the lawmakers are planning to leave town on Aug. 5, and they won't return until after Labor Day. To prevent a government shutdown, Congress will have to act before hitting the road.

MINIMUM WAGE

Despite President Bush's veto of minimum wage legislation, sustained by the House on June 14, the prospect of an increase this year remains very much alive. The Democrats are trying to put together a new compromise proposal. A key ingredient: raising the hourly rate from \$3.35 to \$4.25 over a two-year period, rather than the three-year term asked by the White House. The vetoed bill called for a \$4.55 wage. The Democrats won't accept Bush's call for a six-month "training wage." But they're ready to buy the principle of a lower rate for new workers, if it's paid for only 60 days.



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THE SHOCK WAVES FROM BEIJING

DID CHINA'S ROLE AS A PARTNER IN ASIA'S ECONOMIC GROWTH END IN TIANANMEN SQUARE?

For at least a decade, governments and business leaders around the world have based their Asian thinking on the belief that China was an economically developing, politically stagnant giant. Now all that has been stood on its head. There is a new China syndrome.

The upheaval in China and the new hardline face of its leadership are forcing a major rethinking of Asia's future. Long-standing configurations of geopolitical and economic power could undergo rapid and profound shifts. At stake are U.S. ties with major Asian partners as well as multibillion-dollar flows of trade and investment.

The worst fear is that the conservative leadership surrounding Deng Xiaoping will retreat into an isolationist, damn-the-world stance. China already

laid the groundwork for a major confrontation with Washington over the presence of leading dissident Fang Lizhi at the U.S. embassy in Beijing. Chinese authorities have issued a warrant for his arrest as an organizer of China's civil upheaval and are bitterly criticizing the U.S. for harboring him.

China also is headed into a showdown over control of its economy. Beijing wants to rein in freewheeling enterprises in living coastal regions in a bid to reassert a 1950s-style central-controlled economy. That is likely to produce massive resistance in southern China, where thousands of factories now operate independently. To assuage investors, the government may hand out new wage increases, heightening inflation, which was already running at 10% before hoarding started. Confusion is going to make it extremely difficult for U.S. and other foreign companies to do strategy (page 78) and ally tough for Washington to dictate an economic response to its allies.

LE EFFECT. As the recognition sets in that aging Chinese leaders are going to exercise power for the foreseeable future, the ripples are spreading globally. Virtually every major strategic issue in Asia is affected by China's turmoil. Vietnam's decision to withdraw from Cambodia in favor of a new coalition government may go less smoothly. Beijing does not help curb the Khmer Rouge. Rapprochement between North and South Korea could be set back, as U.S. hopes of withdrawing troops from the South (box).

Japan's ties with Washington are predicated on a stable China and could now undergo a major shift. The Japanese are arguing that the Americans need to do more than ever and that trade pressure may have to be relaxed. "The U.S. will have to recognize that Japan is the country they can count on developing foreign policy in Asia," says Susumu Saito, Credit Suisse Investment Advisor Co. in Tokyo.

China's attempt to return its economy to *status quo ante* will probably fail. Foreign governments around the world are suspending export insurance and buying Chinese bond issues. Some U.S. and other foreign businesses will remain in China, but other countries are scrambling for investment and

trade once presumed destined for China. South Korea, Taiwan, Thailand, and the Philippines are angling for those trade and investment dollars.

Just days after the Tiananmen massacre, Thai Prime Minister Chatichai Choonhavan told government agencies to prepare for investments from compa-

where else, and I hope here," he says.

With so much at stake, Washington is fighting hard to maintain the appearance of stability in ties with Beijing. Despite public pressure for harsher measures, the Administration says it does not intend to risk any change in China's role as the strategic counterweight to the Soviet Union. Similarly, optimists argue that China may have no alternative but to continue relations with the U.S. and its Western allies. But the dark fear of China watchers is that Deng will sacrifice many foreign economic ties if needed to reestablish political control.

One ironic twist is that, for the moment at least, the U.S. finds itself back in a leadership position regarding China, setting a pattern for both diplomatic and economic dealings with the Middle Kingdom. The Administration's policy of suspending military ties while maintaining diplomatic relations has won applause from most quarters. And many companies from other countries seem to be in close step with U.S. attempts to resist a return to business as usual.

AN EDGE? The exceptions may include Japan and Korea. Tokyo has not followed Washington's lead in applying even mild sanctions. "We need a stable China," says Kazuo Nukazawa, managing director of Keidanren, Japan's federation of economic organizations. "Sanctions may not work this time." Some Asia watchers believe that at the first sign of restored stability in China, Japan will plunge back in, gaining a competitive edge on American and European business. "Is this just a business opportunity for Japan?" ponders Anthony Kane, director of the Asia Society's China Council.

Even in the absence of diplomatic relations with China, Korea's two-way trade amounts to about \$3.1 billion, and Korean companies have invested \$300 million in China. Companies such as Daewoo and Samsung have ordered their representatives back to Beijing. "Why should our officials waste their time by

staying in Hong Kong?" says one executive. The Korean government and companies are hoping to gain ground in China while other nations grope for a response. For Bush, the old China hand, the policy decisions are just starting.

By Bill Javetski in Washington, with Robert Neff in Tokyo, Dori Jones Yang in Hong Kong, and Larmi Nakarmi in Seoul



THE U.S. STANDS PAT IN KOREA

Before the upheaval in China, pressure was building on the U.S. to gradually reduce its 46,000 troops in South Korea. Washington seemed willing to oblige. Now, all bets are off, at least for the moment.

In the face of rising anti-Americanism, Washington had been lowering its military profile, among other things agreeing to move a major military headquarters from downtown Seoul. Pentagon sources disclosed that the Defense Dept. was also studying reductions in U.S. troop strength. Goading the Bush Administration was Senator Carl Levin (D-Mich.), a member of the Armed Services Committee, who called for the U.S. to cut troops to 10,000 over five years.

'EVEN MORE DIFFICULT.' Although China supported North Korea's invasion of the South during the Korean War, more recently China has nurtured economic ties with South Korea, while allowing the North to slip into isolation. China clearly stood for stability.

But now that the hardliners have prevailed in Beijing, even critics of the U.S. presence in Korea such as opposition leader Kim Dae-jung are calling for the troops to remain at current levels. Kim initially supported Levin's proposal but changed his position after the Tiananmen massacre. And now, Levin acknowledges "it will be even more difficult" to discuss troop cuts.

The Pentagon will continue to study the issue, hoping China's position becomes clear. Planners would link any withdrawals to progress in North-South talks. "All of us believe that, over time, the level of U.S. forces in Korea can go down," says one official. But it may take longer than anyone had imagined a few weeks ago.

By Dave Griffiths in Washington

nies that might flee not only China but also Hong Kong and Taiwan. Taiwan's stock market, assuming that orders will be switched to Taiwan from China, soared. Philippine Secretary of Trade & Industry Jose Concepcion is also wooing investors. "Even if these companies don't close shop in China, when they decide to expand, they will look some-

U.S. IMPORTERS AREN'T JUMPING SHIP—YET

But many are looking outside China for future supply bases

Like most veteran China hands, Volume Shoe International President Jon Allen was aghast at the brutality of the June 4 Tiananmen Square massacre in Beijing. But he was also concerned for his business: Volume, a unit of May Department Stores Co. that operates 2,700 Payless Shoe Source stores, imports 85% of its shoes from China. If its Chinese factories closed because of the political upheaval, Volume would be in a serious bind.

Hundreds of nervous U.S. importers found themselves in Allen's situation. While the turmoil did not cause the wholesale shutdown of factories that many feared, the China scare is forcing

the Christmas production now beginning, importers are scared that another outbreak of unrest—or a U.S. trade embargo—will leave them out on a limb.

For now, most importers are staying put because they don't have time to transfer production and are hesitant to abandon China's low manufacturing costs and easy distribution through Hong Kong. Tyco Toys Inc. and Hasbro Inc. say they've seen no major delays in their China plants and don't plan to move now. Toymakers can't afford even a mild snag in delivery of the \$2 billion in goodies China produces yearly for U.S. kids. Taking no chances, companies are speeding up production to satisfy

textile product orders placed in China this year. New York's Gitano Group, major importer of jeans and other garments from China, has all its orders booked for spring 1990. "It would be difficult, if not impossible, to place production anywhere else," says Sam Nosenbaum, Gitano's import director.

But much future business that can be diverted to less developed Southeast Asian nations is at stake. Volume's Allen is looking at investing in Indonesia while Nike already is expanding existing joint ventures there. Pier One Importers Inc., which buys nearly half of its rattan items in China, plans to look more closely at Indonesia and Malaysia, says President Marvin J. Girouard. Hong Kong businessmen are stepping up operations in Thailand, says Jeanne-Ming Owens, senior manager for gift wholesaler Applause Inc.

CREAKY 'OPEN DOOR'? China's Guangdong province has two-thirds of the nation's \$11.5 billion in foreign investment and 8,600 joint ventures with Hong Kong companies that churn out so-

90% of the colonial garments, toys, appliances, and gifts. After the massacre, deliveries to Guangdong from Hong Kong slowed for two days, as border police searched vehicles and skittish Hong Kong truckers stayed home. Hundreds of middle managers from Hong Kong and Taiwan, essential in foreign-invested ventures, stayed away from plants in Guangdong and Fujian. Although most have trickled back, the managers have no diplomatic pro-

WAGES IN CHINA: STILL THE LOWEST

1988 average monthly earnings in dollars

SOUTH KOREA*	\$633
TAIWAN*	598
SINGAPORE*	547
HONG KONG*	544
THAILAND	80
PHILIPPINES	75
MALAYSIA	55
INDONESIA	55
CHINA**	40

*Includes bonuses and overtime

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DATA BW



A REEBOK FACTORY IN CHINA: MOST COMPANIES CAN'T MOVE ON SHORT NOTICE

a widespread reassessment of the communist nation as a reliable supplier of an annual \$48 billion in garments, toys, appliances, and other cheap manufactured goods. If repression continues, there is also fear of a consumer backlash. Many name brand products, such as those of Nike, Reebok, and Disney are made in Chinese factories. Concedes Richard Welling, Nike Inc.'s Hong Kong production director: "The State Department can put a lot of pressure on us."

OUT ON A LIMB. These plants, operating more than 1,000 miles from Beijing in South China, are running full tilt, especially in Guangdong province, which borders Hong Kong. But ethnic Chinese managers from Taiwan and Hong Kong are hesitant about returning to work, and deliveries are behind schedule. With

retailers' entreaties for early delivery.

The U.S. apparel industry faces a similar squeeze. Chinese factories already are weeks behind on orders for fall and Christmas, and a six-week delay "can kill the whole season," says Robert M. Frazier, an industry consultant. Fears of a shortage sent spot prices for undyed cotton fabrics up 50% soon after the upheaval in Beijing. A total shutoff of China supplies would lead to acute shortages of materials such as silk and ramie, says Jack Shamash, president of garment maker S. Shamash & Sons Inc. China produces 80% of the world's supply of silk.

There isn't enough factory capacity immediately available in such neighboring countries as Taiwan, South Korea, and Thailand to absorb the \$4.8 billion in

protection if they are detained in China.

The longer-term worry is that the regime will try to impose a 1950s-style centralized economy if it consolidates power. While most analysts doubt that will happen, planners could dampen the "open door" entrepreneurial spirit that boosted growth in Guangdong by 1% and in Fujian by 21% in the first quarter of 1989. Chinese Premier Li Peng previously tried to curb state credit to see projects in a failed attempt to cool inflation. If the regime's wrath broadens to include reformers who trod "the capitalist road," coastal areas may resist. By that time, U.S. importers will already be pounding the pavement all over Asia.

By Dinah Lee in Hong Kong, with the assistance of Gardio and Amy Dunkin in New York and bureau reports



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THE RACE TO STOCK EUROPE'S COMMON SUPERMARKET

BSN paid billions for Nabisco brands—and more food deals will follow

The French don't mind paying through the nose for good food, but this time the bill was unusually steep. In early June, BSN, France's largest packaged-food and beverage group, forked over \$2.5 billion to buy the European cookie and cracker business of RJR Nabisco Inc. At 44 times after-tax earnings, the price was 50% more than some analysts expected.

Yet BSN paid the asking price without a moment's haggling. "It was an opportunity for us—and also a risk if we didn't do it," says Christian Laubie, BSN's financial director. As Europe heads for a unified market in 1992, its \$30 billion packaged-food industry is one of the first to be swept by a wave of restructuring. BSN and its rival food producers must decide quickly whether they want to eat or be eaten.

SNACK SUPREMACY. The big players are already maneuvering to build strong product lines around the Continent, rather than sticking to a country or two as in the past. So when Kohlberg Kravis Roberts & Co. put the Nabisco assets on the block to pay down debt from last November's \$24.5 billion leveraged buyout of RJR Nabisco, it had a captive audience. BSN, keen on extending its domination of France's snack business to all of Europe, could not afford to let the operations fall into a rival's hands.

U.S. companies are also scrambling to expand footholds in a European market that looks more lucrative as unification approaches. In recent weeks, General Foods Corp. and Kraft Inc., both owned by Philip Morris, have begun looking at revamping all their European operations to build more cross-border clout. Other U.S. companies are stalking acquisitions, especially with the dollar's value rising. Chicago's Whitman Corp., for example, wanted to buy many of the Nabisco units. Now, the maker of soups, sauces, and candy is looking for other European deals.

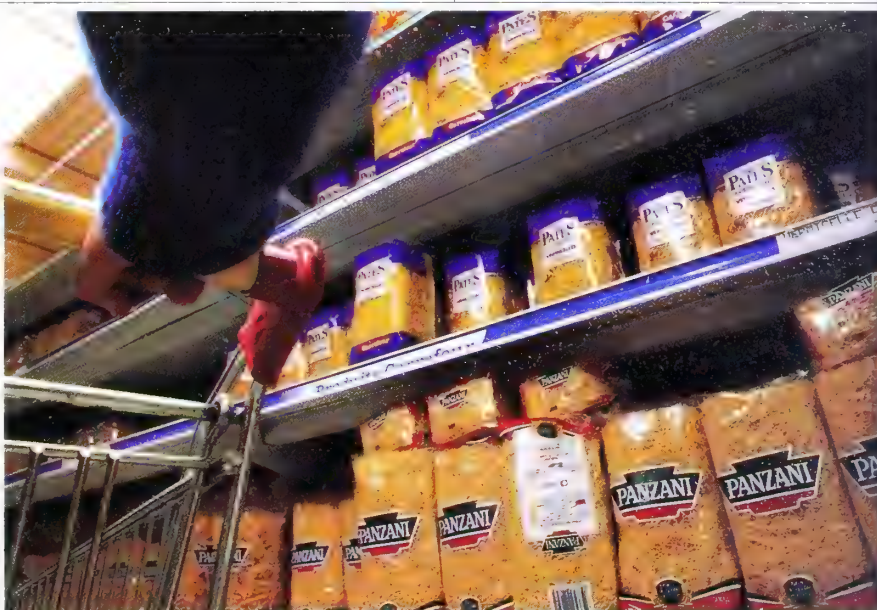
All this activity springs largely from the same phenomenon that consolidated America's food industry in the 1970s: the growing power of supermarkets. Big European

chains like to stock only top brands backed by strong consumer advertising. "There is terrific pressure on the No. 3 or 4 brands," says David Lang, an analyst with London's Henderson Crosthwaite Institutional Brokers Ltd. In addition, a steady homogenization of consumer tastes around Europe is encouraging brands to jump borders.

Takeovers are the quickest way not

Britain has some of the most enticing. Analysts mention Allied-Lyons, Rank Hovis McDougall, Cadbury Schweppes and United Biscuits. Thanks to Britain's free-market policies, "we are definitely more available," admits Pamela Langworthy, business planning director for United Biscuits (Holdings) PLC, a cookie and frozen-food producer with sales of \$3.7 billion. In defense, United is seeking its own Continental acquisitions. It, too, coveted Nabisco.

RAIDER REPELLENT. In France, analysts cite Groupe Perrier and Pernod Ricard, two beverage companies, as possible takeover candidates. Another target could be BSN itself, even though it's now Europe's fourth-largest food concern, after Nestlé, Unilever, and Grand Metropolitan. BSN earned \$320 million on sale



MILES MORE AISLES: THE DEAL GIVES BSN SHELF SPACE IN BRITISH AND ITALIAN MARKETS

only to build product strength but also to expand geographically. MAC Group, a consulting firm, says that Europe's 67 largest food companies made fewer than 20 acquisitions a year in the early 1980s. But after 1985, the number jumped to more than 40 a year, and it should climb higher this year, MAC predicts. No other European industry has seen as much recent merger activity. The deals are also getting bigger. The largest so far is Nestlé's 1988 purchase of British candy maker Rowntree PLC for \$4 billion. Competition may get so tough, predicts BSN's Laubie, that "it may soon be too late" for companies that aren't already looking.

Still, there seem to be plenty of takeover candidates.

of \$6.1 billion last year, and the Nabisco deal will lift sales an additional \$1 billion.

BSN Chairman Antoine Riboud has erected elaborate takeover barrier such as buying a bank to subject a raider to tough government scrutiny. Moreover, the Nabisco acquisition raises BSN's takeover value to perhaps \$15 billion, analysts say. Nonetheless, "I've heard a lot of people say they'd like to get their hands on BSN and sell off the pieces to other companies," says Thomas Seale of MAC Group. The company's leading brands include Danone yogurt, Kronenbourg beer, Maille mustard, Evian mineral water, and Panzani pasta. Now, it will also sell Ritz crackers and Planters peanuts in Europe. Although BSN brass admit the deal will weaken earnings this year and next, the sale makes BSN Europe's biggest cracker company and gives it large markets

Will the EC block future acquisitions? 'The current merger activity looks quite menacing,' says an official

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Italy and Britain for the first time. The French company will merge plants and consolidate distribution.

Concentrating production will become common for Europe's food giants as 1992 eliminates transportation barriers. Nestlé, for example, is producing its new Yes candy bars in Berlin for distribution throughout Europe. Quaker Oats Co., which sees 30% annual growth in

Europe for its ready-to-eat cereals, says it will eliminate 2 of its 15 European plants and merge purchasing units.

But a snag could slow the consolidation movement. The European Commission in Brussels isn't keen on Europe's tables being supplied by a few big companies. A proposal likely to win approval later this year would give the commission greater power to block acquisi-

tions—and commissioners seem eager to use it. "The current merger activity looks quite menacing," says an EC official. "We don't want an irreversible market situation." That, however, seems to be just what Europe's food giants are rushing to achieve.

By Stewart Toy in Paris and Richard Melcher in London, with Lois Therrien-Chicago and bureau reports

SOVIET UNION

'HEY! WANT A HOT LITTLE ALLOY FROM SHEMYAKIN?'

The Soviets get serious about selling their high tech to the West

The location is a Renaissance abbey in Genoa. The center of attention is a Soviet salesman, and the subject is high tech. "I guarantee you," whispers Mikhail Korolev, adjusting a knob on a little oblong electronic device that looks something like a 1950s' Geiger counter, "this has been top, top secret." He waves a perfumed cigarette over the gadget, an instrument for measuring magnetic fields.

Korolev's sales pitch is part of an ambitious new effort by the Soviets to market their technology to the West. Korolev was one of 80 Soviet scientists and technicians who set up an exhibit in Genoa to display their research to the Italian business community. Soviet research is extensive: The country boasts more scientists and engineers than any other in the world, and it spent some \$25 billion last year on military-related science alone. But only a small proportion of the \$107 billion in annual Soviet exports consists of sophisticated

civilian technology. Although the Soviets are eager to translate their scientific achievements into products for export, "they have no idea of the complex process by which a prototype becomes a product for the market," says Giuseppe Veredice, head of research and development at Finmeccanica, Italy's largest mechanical engineering group.

The Italians helped the Soviets select some 300 devices and technologies for

scope, but he admitted after being questioned that GM had only shown "interest." The Kremlin is anxious to prove the West that Moscow can provide leading technology. Ivan Bortnik, vice-chairman of the State Committee for Science & Technology, reported that many Soviet technologies that were secret, including artificial intelligence programs and advanced instrumentation, now have price tags. "I can tell you there are fewer and fewer restrictions now," he says.

'THAT'S PEANUTS.' Bortnik also thinks that upcoming changes in Soviet patent law will give the sales drive a boost. The new legislation will confer the same kind of patent protection enjoyed by inventors in the West—and remove the time and upper limits on royalty payments. At the exhibit, inventor Sergei Falkevich proudly displayed his portable ultrasonic device for testing welds, priced at \$30,000. As the Soviet royalty system stands now, no matter how many of his machines are sold, his sales would be limited to \$32,000. "That's peanuts," he complained.

Western trade experts predict it will be difficult for the Soviets to start high-tech export business. "They will climb the learning curve quickly, but they are starting at a very low level," says Bernard O'Meara of Washington-based Kiser search Inc., which licenses Eastern technology in the West. O'Meara thinks the Soviets will be successful in selling discoveries in such down-to-earth fields as ceramics, chemicals, plastics, and metallurgy to Western companies, but cautions that the Soviets are still clumsy at presenting their products. And he says they have yet to prove they can perform on schedule. Indeed, it will take a lot more than an exhibit in Genoa to turn the Soviets into big-time exporters of high tech.

By John Rossant in Genoa, with Fel Galuszka in Moscow and Stanley Reed in New York



the Genoa exhibit. The affair was more show than hard sell. But some deals were cut on the spot, including one by Iritech to license Soviet knowhow in prosthetic devices. The Italians say they are ready to license several other Soviet techniques, particularly in biotech. The Soviets are already involved in a small joint venture in Sardinia to produce industrial membranes.

Visitors found the Soviet scientists, like all salesmen, to be eager. One Russian company official began a conversation by claiming that his firm had sold General Motors Corp. an electron micro-

scope, but he admitted after being questioned that GM had only shown "interest." The Kremlin is anxious to prove the West that Moscow can provide leading technology. Ivan Bortnik, vice-chairman of the State Committee for Science & Technology, reported that many Soviet technologies that were secret, including artificial intelligence programs and advanced instrumentation, now have price tags. "I can tell you there are fewer and fewer restrictions now," he says.

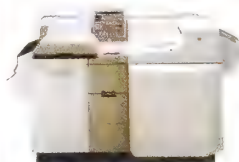
SHOW AND SELL. The Italians, who see technological transfer as a new way of conducting trade with the Soviets, are trying to help. Last January, a team of executives and researchers from IRI, the \$41 billion state-owned industrial and fi-



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GORBACHEV LAYS THE CORNERSTONE FOR HIS 'COMMON EUROPEAN HOUSE'

To the cheers of West Germans, Mikhail S. Gorbachev stole back the initiative in East-West relations that George Bush had seized only two weeks earlier. The Soviet leader's visit to Bonn in mid-June was a political and diplomatic triumph, but it raised new concerns among Western European allies. Gorbachev outlined a plan for economic cooperation that the Soviets hope will be the cornerstone for a "common European house." That's Moscow jargon for a social and economically integrated Europe. He said that talks on Bush's plan for deep cuts in conventional arms should go ahead at the same time.

Because West Germany is a key player in both areas, how it handles the Gorbachev proposals will have a major impact on the Western alliance. The Germans want to stay close to the U.S. position on defense issues, but Chancellor Helmut Kohl is now taking the lead in shaping the West's economic ties with Moscow. For example, he and other European allies want the U.S. to ease its opposition to sales of high-tech equipment to the Russians. Longer-term, Kohl's efforts to strengthen economic ties will put pressure on the Bush Administration to spell out its own conception of the common European house—and the role of the U.S., as well as the Soviet Union, in it. Although Bush says he favors "the integration of the Soviet Union into the community of nations," he has proposed few practical steps to achieve it.

TREATY OF FRIENDSHIP. The principal agreement signed by Gorbachev and Kohl is Moscow's first friendship treaty with a Western country. The joint statement confirms that the "Brezhnev Doctrine"—that is, the right claimed by Gorbachev's predecessors to intervene unilaterally to prop up shaky communist regimes—is moribund. Although a tottering East European government could still invite Moscow to rescue it by sending troops, the Brezhnev Doctrine has already been deep-

ly undercut by Polish and Hungarian moves toward political pluralism.

On the economic front, Kohl and Gorbachev signed the West's first investment protection treaty with Moscow. The Germans agreed to train 1,000 Soviet managers through seminars and corporate programs, and German companies are negotiating to set up high-tech ventures in a Soviet free-enterprise zone near Leningrad. So far, Germans have launched 2 joint ventures in the Soviet Union, but they have invested only about \$100 million. "[You should be] offering strategic projects rather than trifling ventures," Gorbachev admonished top executives in Cologne. He proposed deals in industries ranging from aerospace to cable networks and high-speed railroads.

With that invitation and the new treaty protection, a top businessman says, German investment could quickly double triple.

'OPEN SORE.' Some allies worry that the Germans are being lured into a Soviet trap. "The Soviets are trying to divide NATO and play upon the current German Gorbymania," an aide to British Prime Minister Margaret Thatcher warned. Referring to Gorbachev's July 4-6 visit to France, he added: "The question is how much mischief he can do with others."

Although Gorbachev and Kohl sidestepped the issue of reunifying East and West Germany, Soviet control over the eventual reunification of the two Germanys is a trump card Gorbachev holds. "The continuing division of Germany is like an open sore for us," Kohl told him.

At the same time, Kohl is trying to keep a strong U.S. voice in the discussions. He emphasized to Gorbachev that West Germany is solidly behind the U.S. on disarmament issues, and convinced him that the U.S. must be one of the architects of the European house. The challenge for Bush is to come up with a plan for economic as well as military détente.

By John Templeman and Gail E. Schares in Bonn



GORBACHEV, KOHL: MAKING ECONOMIC DEALS

GLOBAL WRAPUP

BRAZIL

Only five months before Brazil's Nov. 15 presidential election, a little-known moderate has suddenly opened a wide lead over leftists who had been the front-running candidates. Polls give 40% of the vote to Fernando Collor de Mello, 39, the telegenic former governor of Alagoas, a small northeastern state. Campaigning as an independent reformer, Collor seems likely to attract backing from center-right parties that have been searching for a vote-getting candidate. Trailing Collor, with 12% and 9% respectively, are Leonel Brizola, the Democratic Labor Party's candidate, and Luis Ignácio

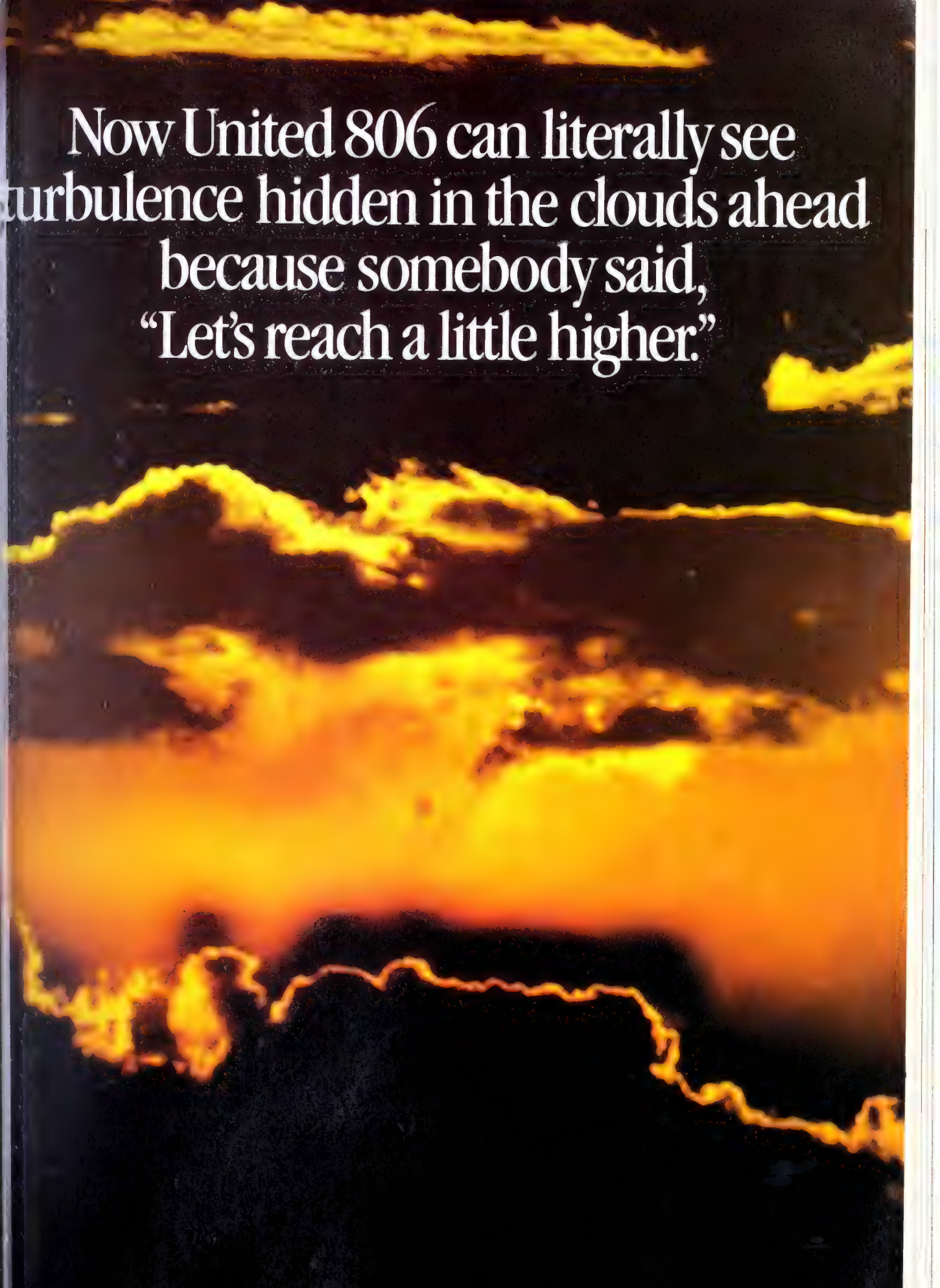
"Lula" da Silva of the Workers' Party.

Brizola, the populist former governor of Rio de Janeiro, is trying to edge toward the political center, while Collor, trained as an economist, is campaigning as an outsider stressing morality in politics. But Collor has started staking out probusiness positions, including an end to computer-import curbs that have caused a trade row with the U.S. And he has powerful supporters such as Roberto Marinho, owner of the vast TV Globo network. Collor's family owns a newspaper and TV station linked to Globo. Marinho is a bitter foe of Brizola, who vows that as President he would break Marinho's grip on Brazilian broadcasting.

SOUTH KOREA

To avoid "political confusion," President Roh Tae Woo announced on June 8 that he was canceling a mid-term referendum on his performance that he had promised. But reneging on his pledge seems likely to add to the current labor and student unrest. Kim Dae Jung, leader of the National Assembly's biggest opposition bloc, vowed to try to throw out Roh's government if Roh fails to follow through on democratic reforms and allow his predecessor and ally, Chun Doo Hwan, to testify on charges of repression and corruption. Kim threatens to mobilize street protests if Roh doesn't comply.

Now United 806 can literally see
turbulence hidden in the clouds ahead
because somebody said,
“Let’s reach a little higher.”



A black and white portrait of Robert E. Doll, a man with glasses, smiling, wearing a dark suit, white shirt, and patterned tie.

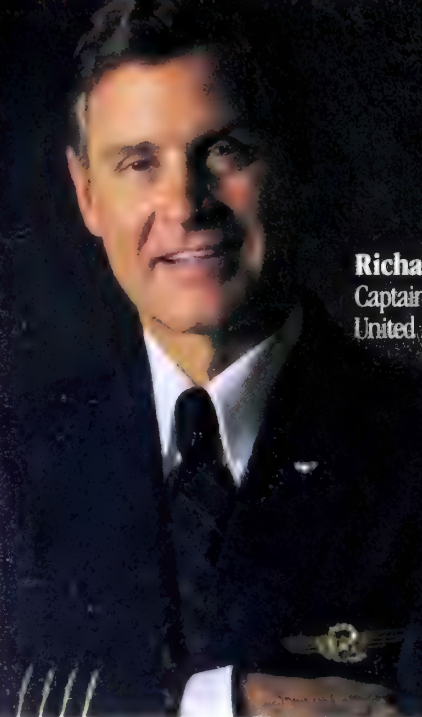
Robert E. Doll
Vice President, Technical Services
United Airlines

A black and white portrait of Roy E. Robertson, a man with glasses, smiling, wearing a light blue striped shirt and a yellow tie with dark polka dots.

Roy E. Robertson
Weather Radar Development
Collins Air Transport Division
Rockwell International

Accurate information is essential in any business. When your business is transporting hundreds of people thousands of miles in comfort and safety, it is crucial that your weather radar point out every bump along the way. Now, thanks to the close working relationship between the Collins Avionics people of Rockwell and the airline industry, pilots can easily distinguish between clouds that contain turbulence and those that don't. Here's the story from the people who made it happen.





Richard D. Russell
Captain
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Doll: And was affordable.

Mumford: Is that all?

Doll: Actually, in a case like this where we're going for a new technology, product and follow-up support are much more important than price.

Robertson: Often the toughest problem for us is to really understand exactly what the flight crews want. The most valuable thing

we can do is ride the airplanes firsthand, in the cockpit with the crew.

Russell: We're always happy to have you along, because it lets us feed back information directly. One of your people was with me on a flight between Denver and Dulles, and when the radar picked up turbulence as advertised, he looked like the cat that ate the canary.

Robertson: Every crew we fly with, we learn more about the product and perceptions of it.

Russell: This is a team effort. Our engineering department has a reputation for being tops and I think they get the best out of our friends at Collins.

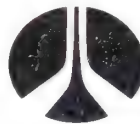
Doll: It's a very positive relationship. If we have any kind of a situation with a Collins product, we expect them to be

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SAM ZELL, THE PERPETUAL DEALMAKING MACHINE

From real estate tycoon to makeover ace—to railroad baron?

Not content to send store-bought Christmas cards to his 400 closest friends and business associates, Chicago investor Sam Zell cooks up an original holiday greeting each year. In 1987, he sent out a poem commemorating that October's crash, a takeoff on the Humpty Dumpty nursery rhyme. Another year, he expressed his contempt for paper pushers by sending out hundreds of statues depicting a pudgy bureaucrat in boiling water.

Bureaucratic inertia is one affliction Zell will never have to worry about. In the past five years, the restless real estate investor-turned-corporate dealmaker has transformed Itel Corp., a once-bankrupt equipment lessor, into a profitable leader in rail-car and ship container leasing, harbor dredging, and high-tech wiring. At the same time, Zell and his behind-the-scenes partner, Robert Lurie, have used a flurry of deals to turn Great American Management & Investment Inc. (GAMI), once a defunct real estate investment trust, into a profitable financial services, manufacturing, and agricultural chemicals conglomerate. All told, the Zell-Lurie investments are worth close to \$1 billion. Says F. Philip Handy, an Itel and GAMI director: "Sam's tied by IV to an acquisition machine."

Now, Zell, 47, is working on his biggest makeover yet: Santa Fe Southern Pacific Corp. Last summer, Itel paid Henley Group \$1.2 billion in cash and company stock to acquire a 17% stake in Santa Fe, plus a few other Henley assets. With \$3.1 billion in 1988 revenues, Santa Fe owns 2.8 million acres of real estate, large oil and gas reserves, and a huge fuel-pipeline

network, and its namesake railroad. But Santa Fe's erratic earnings have pushed the per-share price down to about 23 from its precrash high of around 64. Now a board member, Zell heads a committee he says is looking for ways to boost the stock price.

HEAD-ON COLLISION? What he really wants, say some other Itel investors, is to get control of Santa Fe's railroad for himself. The railroad would give Zell 11,000 miles of track for moving Itel's boxcars. But there are several imposing roadblocks: Olympia & York Develop-

ments Ltd., the huge Canadian real estate developer, last year acquired a 20% stake in Santa Fe and might object to Zell's plans for the railroad. Nor is management likely to roll over and play dead. Santa Fe fended off Henley's takeover attempts for 15 months before Zell stepped in and bought Henley out.

He won't say whether he wants to buy the railroad. But in the meantime, Itel is carrying a breathtaking debt-to-capital ratio of 76%. Interest payments on the money borrowed to buy into Santa Fe will cut \$1.15 a share from Itel's 1989 net income, to 55¢, or \$27 million, estimates brokerage Furman Selz Maguire Dietz & Birney Inc. Wall Street is cautious: Itel's stock, currently at around \$22, has changed little over the past year.

While certainly a man in motion, Zell is hardly the typical corporate dealmaker. The Chicago native, whose father was also a real estate investor, rides a motorcycle to work year-round and usually wears jeans to the office. Once a year, he leaves his wife and three children behind, hops on his

Ducati racer, and tours a foreign country for a couple of weeks. He also has a habit of memorializing events.

When a company owner pulled the plug on a deal at the last minute, Zell commissioned a sculptor to depict a hand pulling the owner's name out of Zell's Rolodex.

Zell and Lurie first got into real estate by managing off-campus student housing while seniors and fraternity brothers at the University of Michigan. In the mid-1960s, when Zell went to law school and Lurie worked on a master's in engineering, they began investing in houses. According to Donald S. Chisholm, an Ann Arbor (Mich.) real estate broker who invested in some of their first deals, Zell and Lurie each made about \$50,000 a year during graduate school.

Shortly after graduating, Zell and Lurie formed Equity Financial & Management Co. It soon started scooping up troubled properties from collapsed real estate investment trusts, spruced up buildings, and used cash flow to buy more. By the



ZELL'S FAR-FLUNG EMPIRE

College pals Sam Zell and Robert Lurie started out buying real estate in the 1960s. They now share equal ownership in diverse interests valued at close to \$1 billion.

ITEL Annual revenues: \$1.6 billion. Operates seven short-line railroads, leases rail cars and ship containers, dredges harbors and rivers, and makes wiring products. Also holds 17% of Santa Fe Pacific and almost 20% of shipping company American President. Zell and Lurie's 25% stake is worth \$305 million.

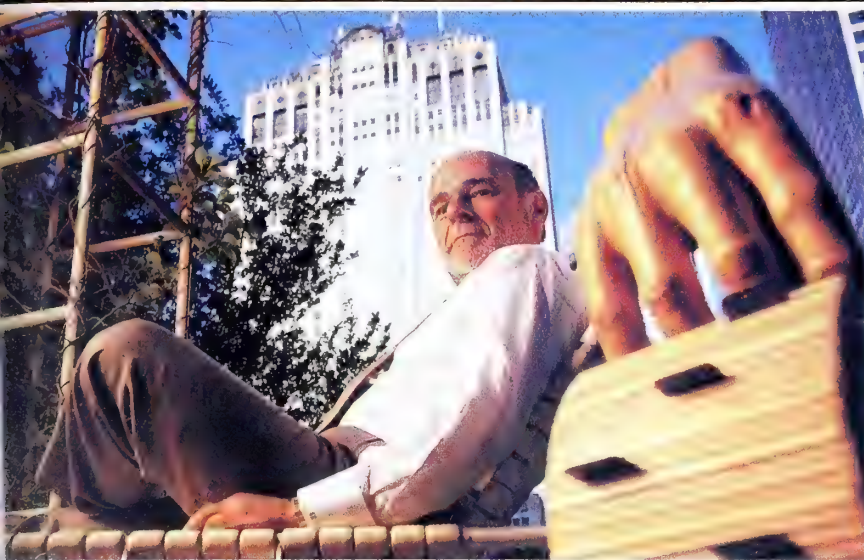
GREAT AMERICAN MANAGEMENT & INVESTMENT Revenues: \$1.2 billion. Interests in financial services, manufacturing, and agricultural chemicals; 92% stake is worth \$283.5 million.

NUCORP Revenues: \$7 million. Oil and gas producer; 41% stake is worth \$23.1 million.

REAL ESTATE Revenues unavailable. Equity Holdings real estate management firm controls 10 million square feet of office space, 20 million square feet of shopping centers, 25,000 apartments, and 13,000 mobile home spaces.

OTHER HOLDINGS Investments in the Chicago Bulls and Chicago White Sox, 100% ownership of Mississippi River pleasure-boat company, and 7% of Horsham, owner of gold-miner American Barrick and Clark Oil & Refining.

DATA: BW, COMPANY REPORTS



ODEX REMEMBRANCE: ZELL AND HIS MEMORIAL TO AN ABORTIVE DEAL

0s, when changes in the tax laws made it hard to find solid, undervalued properties, they began eyeing corporate acquisitions. Explains Zell: "You have to know your limits."

GAMI certainly did that. When the partnership first bought 3.5% of its stock in late 1980, the former REIT had just emerged from Chapter 11. In early 1981, when GAMI owned 22%, they refinanced its debt on easier terms and used cash flow from property sales to fund a massive acquisition spree. Zell bought some 80 companies, diversifying into everything from a savings and loan to a lawn fertilization company. Last year, GAMI netted \$1.2 billion on revenues of \$1.2 billion. Having put GAMI on the road to recovery in 1984 Zell went after IteL. After acquiring 10% of its stock, he joined the board in 1985. He then helped to lead out the management team and later became chairman, president, and chief executive. He and Lurie today own 25%. His acquisitions for IteL, totaling \$3 billion, include warehouses and short-railroads. The company earned \$24.8 million last year on revenues of \$1.6 billion. What did he see in IteL and GAMI that other investors overlooked? Tax-carryforwards of \$400 million and \$1 million, respectively. Now that the companies are humming, he'll be able to reap profits from taxes for years.

IR AND TRIAL. Zell and Lurie complement each other nicely. Zell formulates strategy, while Lurie is the detail man, managing properties and overseeing operations. Lurie prefers to stay out of the spotlight and declined to be interviewed for this article. More deliberative than his partner, he often has to rein in the exuberant Zell. On Lurie's wall is a Jasper Johns print that shows a yellow arrow pointing down to the word "no." Referring to the artwork, he told a visitor: "That's my job here." Zell and Lurie don't have the Midas

touch with every acquisition. They lost \$12.9 million in 1984 by investing in Houston-based Raines Tool Co., an oil-field service company that they wound up liquidating. But far worse than any underperformer was the cloud that hung over them early in their careers: In the early 1970s, Zell was indicted for conspiracy to defraud the U.S. government during a federal tax investigation of the 1969 sale of a Reno (Nev.) hotel and apartment complex. Zell headed the investor group that bought the property for \$13 million. His brother-in-law, lawyer Robert Baskes, represented the sellers. The charges against Zell were dropped before the case went to trial in 1976. Baskes, however, was convicted on the same conspiracy charge and served two years in prison.

In the past year, Zell has been diving back into real estate, buying into overbuilt markets where everyone else seems to be selling. Backed by \$350 million from Merrill Lynch & Co. investors and \$30 million of his and Lurie's cash, Zell has snapped up 15 properties, including a Salt Lake City shopping mall and a Houston office building. In vintage fashion, he and Lurie have also gradually bought 41% of Nucorp Inc., a bankrupt oil-and-gas producer with \$284 million in tax-loss carryforwards.

A top priority, however, is sorting out Santa Fe. In March, it was ordered to pay \$1 billion—later reduced to \$750 million—to settle a suit brought by Energy Transportation Systems accusing Santa Fe of trying to block a coal-slurry project. That has held Zell back. Now, besides appealing the verdict, Santa Fe is negotiating for a bank letter of credit to cover the damages, which could help clear the way for breaking up the company. Given that Zell's stake in Santa Fe is pinching IteL's earnings, don't expect him to sit still for long.

By Lois Therrien in Chicago



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EDITED BY ANDREA ROTHMAN

GRADING THE BIG APPLE FOR AN ORCHARD

After 12 years at a stock brokerage, Joseph Cerniglia packed up and set off to grow apples in Vermont. But Wall Street sensibilities remained with him. While his orchard prospered, Cerniglia resent losing money on "ulls," the 20% of his sales that came out of small or otherwise salable for eating. Other than sell to juicemakers at a discount, he decided three years ago to seek profit from them—by making wine.



Joseph Cerniglia Winery Inc. is now the largest of 36 New England wineries, with sales of \$700,000 in 1988, up from \$4,000 in 1987. It's also one of very few in the world to specialize in varietal apple wines—made from a single type of apple, such as a Granny Smith. The toughest challenge, says Cerniglia, 49, is getting over "the Boones Farm stigma." Though popular with the younger crowd, Boones Farm and other fruit wines have a sweet, syrupy taste that drives oenophiles away.

Cerniglia has to persuade consumers his wines are different. It seems to be succeeding. Priced at \$5 to \$7 a bottle, his offerings run from dry to semisweet and have won awards and rave reviews. "They are truly superior apple wines," says David Goldberg, wine writer for *The New York Times*. So far, Cerniglia's wines are distributed in only 14 states. He is to expand both here and abroad, where fruit wines already enjoy great popularity. Still, despite what he calls "the prior quality" of the farming life, he doesn't recommend it to all disgruntled Wall Streeters. "If they're interested in making money," he warns, "they should stay right where they are." Or maybe that's just another holdover from his Wall Street days: He'd like a minimum of competition.

By Robert B. Duffy in Proctorsville, Vt.

THESE WALLS HAVE EARS FOR MUSIC AND BUSINESS

The 1985 "USA for Africa" concert raised millions for drought-stricken Ethiopia. It has done wonders for brothers in Los Angeles. Kevin and Karl. Their Radio Vi-



International Inc., which sells worldwide broadcast rights for concerts, had barely gotten off the ground when they heard about the benefit. Without taking a step they offered to act as middlemen between the concert producers and foreign broadcasters. The dollars have been rolling in ever since.

The Walls' show-biz career began in 1974 when Kevin found a job erecting scaffolding for concerts. Watching a television crew trail the Rolling Stones one day gave him an idea. He began talking with concert producers about buying their broadcast rights to sell to foreigners. "I knew I could score a hit," he recalls.

He was right. By 1985, Kevin, now 37, and Karl, now 38, had formed RVI. And European, Latin American, and Asian markets have proven hungry for their fare. They now distribute broadcast rights to 63 countries at as much as \$250,000 a pop. This year, concerts by the likes of Elton John and Paul Simon will boost revenues to \$22 million, from \$200,000 in 1985.

Concerts are just the beginning. This fall, the Walls plan a one-hour weekly report on pop music called *Go Global*. Produced along with the British Broadcasting Corp., it is to air on the 113-station Fox network and in 14 other countries. By 1990, RVI plans to open a marketing unit that will match rock groups and advertisers seeking events to sponsor. They're aiming for \$50 million in sales by 1992. Even if they don't reach that goal, the job pays better than setting up scaffolding.

By Patrick Cole in Los Angeles

D. LARRY CRUMBLY: LAYING BARE THE FLESHPOTS OF ACCOUNTING

Lenny, a mild-mannered accountant, finally finagled a tête-à-tête with the lovely Dana. She ran a diamond shop; his hobby was gems. They laughed, they giggled, they cooed. Then Dana really turned Lenny on. Leaning over, she murmured: "Inventory is out of control."

Last Tango in Paris it's not. But then, *Accounting the Golden Spire*, the new novel from which this episode is drawn, offers something *Last Tango* doesn't: juicy information about that most titillating of subjects, accounting. Credit goes to D. Larry Crumbly, a



Texas A&M University accounting professor who aims to lend excitement to the study of debits and credits by couching the stuff in romantic prose.

With three novels published and four ready to go, Crumbly, 48, seems well on his way to becoming an established author. But working his way onto bookshelves wasn't easy. He began his first thriller nine years ago. When publishers rejected it, Crumbly quickly conceded any artistic ground he held. "I added sex to it," he says. Arizona publisher Thomas Horton & Daughters called in 1984, but asked him to cut the sex for fear of offending professors. Crumbly has worked with assembly-line efficiency since, churning out titles such as *The Ultimate Ripoff: A Taxing Tale*—about tax accounting, of course.

In *Accounting*, Lenny nabs international jewel thieves by tracking invoices. And the villain lectures a maître d' about goodwill when he fights for a restaurant table. Now, Crumbly hopes to share his talents with other students. He has collaborated on a chemistry-as-romance novel: "I can really write about anything. Coming from someone who has penned romances about accountants, that goes without saying."

By Todd Vogel in College Station, Tex.

Midyear Investment Outlook



If it were at all possible, some investors would probably like to close the books on 1989 right now. After all, the stock market has climbed higher than most dared to hope. Long-term interest rates have fallen faster than anyone imagined only weeks ago. And the dollar, not long ago the old maid of foreign exchange markets, is now the world's hottest paper.

Where do you go from here? The Dow is up 15.5%, the Standard & Poor's 500 is up 16.7%, and over-the-counter stocks are 18% higher than at the start of the year. Do you chase stocks now? Maybe, maybe not—especially when you consider that there aren't too many years when stocks do better than they have already done. Fixed-income investors who remember the 9% yields on long bonds only six weeks ago may balk at accepting only 8.2% now. But on the other hand, bond yields could approach 7% by yearend. And what about the soaring dollar? Do you stick with the greenback or try to play contrarian and buy sterling, yen, or marks?

Several months ago, such decisions could be put on hold. Investors in doubt could simply put their money into Treasury bills and other short-term instruments. Interest rates were climbing, and, as many market-watchers noted, investors were getting "paid well" to sit on the sidelines. Now



WHERE TO



interest rates are sliding, and short-term instruments are losing their allure. Moreover, the markets are moving so fast that waiting for a better opportunity could cost the investor dearly.

That's why **BUSINESS WEEK's** annual Midyear Investment Outlook is especially vital this year. It can help you plan a new investment strategy or perhaps some midcourse maneuvering. Maybe you had some money in blue-chip stocks, which have done fine. But did you know that small-company stocks are outpacing the big names? And that they're expected to do so for some time to come (page 96)? Can't pick which ones to buy? How about a mutual fund that specializes in the lesser-known issues (page 98)?

We know it's not easy to move you to action. A Harris Poll commissioned by BW reveals that 40% of the public believes that another big stock market crash is likely (page 110). On the Street, such bearishness is considered extremely bullish.

You can't blame people for being nervous. At various times this year, headlines proclaimed a dangerous acceleration of inflation, and just as often they raised the specter of recession as the Federal Reserve Board tightened monetary policy. Now it appears that the Fed's preemptive strike against inflation is beginning to pay off. The prize is a "soft landing," which allows interest rates to continue fall

and profits to stay strong. That's a powerful prescription for higher stock prices (page 94).

Most skeptics concede that Fed Chairman Alan Greenspan has come much closer to producing a soft landing than they expected. The current consensus among economists is that real gross national product will grow at an annual rate of less than 2% for the second half of the year. That pace should keep the core rate of inflation from rising above 5% and allow some further easing of interest rates.

GLOBAL FORCES. The Fed is still vigilant about inflation, tightening up the reins of monetary policy ever so gingerly. Over a span of more than a month, it allowed the federal funds rate—now at 9.25%—to decline by three-fourths of a percentage point. In the meantime, the markets have all but declared inflation tamed. Investors bid aggressively for bonds and drove long-term interest rates down nearly one percentage point in six weeks (page 102). In fact, “the bond market has done the easing for the Fed,” says Nicholas Arana, chief economist at Connecticut National Bank.

Although the Fed can take some credit for good fundamentals, powerful global forces are also improving the investment climate in the U.S. A crackdown against the pro-democracy forces in China has frightened investors away from the Pacific Basin countries, and they're taking refuge in dollar-denominated assets. That's helping to push

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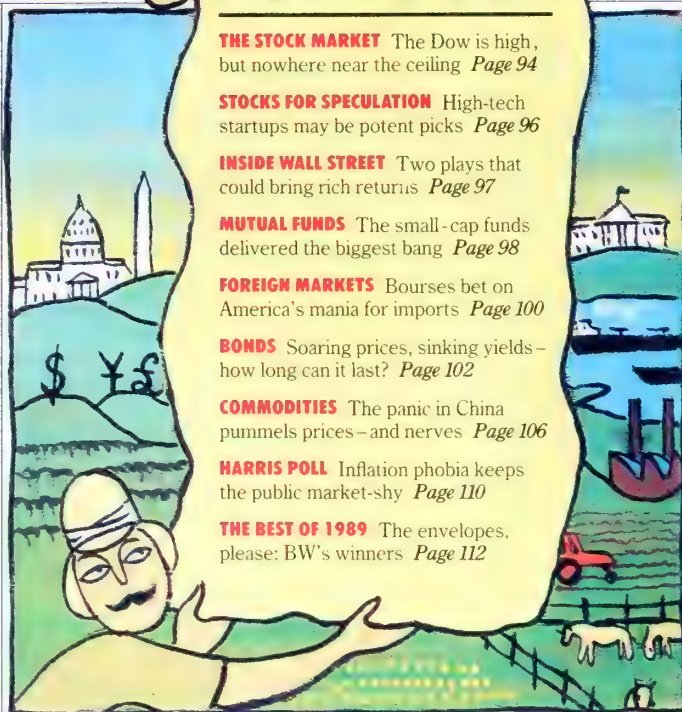
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INVEST

After a surprising first half, here's how the rest of 1989 is shaping up



the dollar to levels not seen in two years. The shift in the greenback has made foreign markets less rewarding to U.S. investors, but our analysis indicates that business is booming abroad, and tempting plays shouldn't be overlooked (page 100).

These global forces have also captured the attention of the crowd in the commodity pits. A stronger dollar dampens commodity prices in general. And there's a China play, too. Traders have been dumping futures contracts on wheat, sugar, and cotton—all goods that China was expected to import (page 108).

The news over the past months has been so positive for U.S. investments that some fear any whiff of bad news could jolt the markets. A higher-than-expected monthly inflation report could drastically alter the outlook for prices. A rebound in an indicator of business activity could suggest that instead of a soft landing, the economy is refueling in midair. A worsening trade deficit could mean that the strong dollar is no longer a big plus because it is making U.S. exports less attractive.

That's all true. Then again, these worries have been with us all year, and look how well the markets have performed. The only time you have to be worried is when everybody else isn't.

By Jeffrey M. Laderman in New York, with bureau reports

IN A SOARING MARKET, THERE'S STILL ROOM AT THE TOP

Wall Street's rally is irresistible to hungry foreign and institutional investors



Six months ago, only the boldest bulls dared predict that the Dow Jones industrial average would make it to 2400 in 1989. That would have been a nifty 250-point rise. Well,

the Dow crossed that threshold more than a month ago and has vaulted over the 2500 mark. And indications are that before the year is out, stocks could chalk up a few more century marks, challenging—and even surpassing—the all-time high of 2722.

It's not that the bulls of December were too timid. It's that the environment for U.S. stocks has gotten a lot friendlier. The chances are good that the economy will be able to make a soft landing, allowing interest rates to continue falling and profits to stay strong. The turmoil in China and rising interest rates and inflation in Europe are driving foreign investors to the U.S. The dollar is up 20% so far this year, as global investors increasingly seek a safe haven. Dollar-denominated assets have become the investment of choice.

PLENTY OF CASH. But the case for stocks doesn't end there. Merger mania, which had cooled down earlier in the year, is revving up again. In the last month, the bidding has become fast and furious on NWA Inc. And Paramount Communications Inc.'s \$10.7 billion all-cash bid to bust up the no-cash Time Inc./Warner Communications merger is a sign that corporate assets are still undervalued—and there's plenty of money around to gobble them up at higher prices. "High short-term interest rates slowed the deal market," says John D. Connolly, an investment strategist at Dean Witter Reynolds Inc. "But rates are coming down, and there are plenty of deals to be done."

So powerful are the forces behind the rally that Carmine Grigoli, chief equity strategist at First Boston Corp., flat out

predicts the Dow will hit 2600 this summer and 2850 by early 1990. The Dow, at 2504, is already up 15.5%. The broader Standard & Poor's 500-stock index has done even better—up 16.7%. And don't forget to add 1.7% to each of those for dividends. The Dow is within 10% of its all-time high; the S&P 500 only a little less than 5% shy. The Dow transportation average smashed through its old high two months ago. The utility average has another 12% to go, but with

people are saying the same very bullish things now as they said then." Nelson's firm has been bullish since stocks were barely off their postcrash lows in December, 1987. More than 600 Dow points later, stocks don't look like great bargains to him. Still, Nelson's firm has a diverse list of recommended stocks that includes such beaten-down big names as Digital Equipment, Eastman Kodak, Ford Motor, and K mart, along with a handful of utilities and regional banks.

Nelson's fears about 1989 notwithstanding, the differences between the summer of 1989 and 1987 are striking. For one thing, earnings are about 50% higher over then they were then. That means the S&P 500, at 321, is selling at only about 1.1 times this year's earnings. That is slightly below the long-term average for the market's p-e ratio. In 1987, the p-e was about 20. If that ratio were to reach only 15, then the S&P would be at 481 and the Dow would be above 3000.

POISED TO BUY. Just as important, interest rates are now falling, and the dollar has found new muscle. A year ago, rates were rising and the greenback was the weak sister of the currency markets. The strengthening dollar creates demand

for U.S. investments. And falling interest rates make stocks an attractive alternative to bonds.

Just how attractive is shown in the accompanying chart (page 95). The line shows the relationship between long-term interest rates, the yield on a 30-year U.S. Treasury bond, and the S&P 500-stock index. The data come from Morgan Stanley & Co., and they show that the S&P 500 will earn about 16% this year—not an overly optimistic estimate. Right now, the stock market is undervalued. At the current 8.2% rate, the S&P should be at 356, or 10% higher. That would put the Dow over 2700.



interest rates on the decline, it may well make it this year.

Small-company stocks are once again outpacing the big ones: The American Stock Exchange Index is up 19% and has matched its old record. The NASDAQ Composite Index, the broadest measure of the over-the-counter market, is up more than 18% and is near its 1987 peak.

All told, the market has come so far, so fast that many investment advisers are raising yellow flags. "I went to the library and pulled out lots of articles from the summer of 1987," says David E. Nelson, director of research at Legg Mason Wood Walker Inc., a regional brokerage firm. "And a lot of the same

Of course, even if stocks were to follow the Morgan Stanley model, it wouldn't be an easy ride up the ladder. As the market moves up, volatility is also picking up steam. The wild intra-day swings associated with program trading have become more evident of late. And market technicians warn that there hasn't been a correction to this rally run. Should one come, it's unlikely to turn into a rout.

Money managers who have missed the rally are poised to buy on dips. Take John Maurice, portfolio manager of the \$1 billion Putnam Fund for Growth & Income. Because of the market's swift come, some of the stocks he wanted to buy got away from him. Now, he's ready to snap them up on a pullback. "I suspect there are a lot of players who are light on equities right now," he says. And together they create a strong demand for equities, while the supply has slunk by 25% over the last five years because of takeovers, mergers, and stock buybacks. Here's where the demand will be coming from:

Foreign investors. They vanished after

The economy seems headed for a soft landing, making the outlook rosier for cyclical stocks

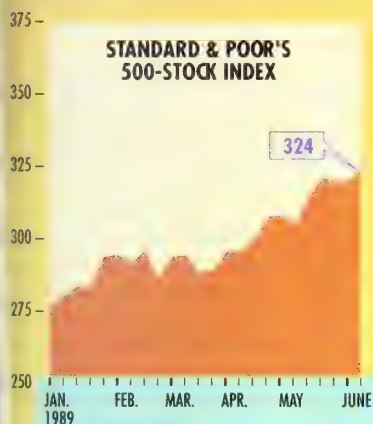
cheap from abroad. Says Andrew Barker, head of North American equities at London-based Foreign & Colonial Management Ltd.: "We're quite optimistic about the U.S. market in relation to other share markets."

■ **Pension funds.** Pension funds poured plenty of cash into stocks in the past few months. Yet, their appetite for equities may not be sated. Charles T. Casazza, director of investment strategy at Cowen & Co., notes that over the past 15 years, the equity portion of balanced pension funds—those that buy stocks and bonds—has ranged from as little as 46% to as much as 68%. Today, the average allocation to stocks stands at only 49%. That, says Casazza, shows the pen-

to draw investors from the sidelines. New money has begun to flow into mutual funds. "People are starting to call unsolicited and ask for investment ideas," says Chuck ReCorr, a Merrill Lynch & Co. account executive in Raleigh, N.C. But stocks are still far from the people's choice. The level of block trades—those of 10,000 shares or more—is high, notes Steven Goldstein, a market analyst for Knight-Ridder Trade-center. "It's all institutional," he says. "No individuals in sight." And a recent BUSINESS WEEK/Harris Poll (page 110) indicates that only 5% of the public puts common stocks at the top of their investment list. But as far as the stock market is concerned, history shows that this is a bullish sign. When the public is clamoring for stocks, it's usually the top of the market.

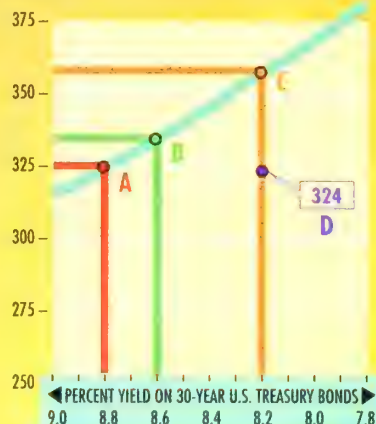
So far, the rally has been concentrated in the noncyclical companies that cater to the consumer. Such stocks as PepsiCo, Philip Morris, and Walt Disney have led the pack. Cyclical stocks, on the other hand, have barely moved. Investors fear that the economy will wind up

STOCKS HAVE CLIMBED MIGHTILY THIS YEAR – AND COULD MOVE EVEN HIGHER



▲ STANDARD & POOR'S 500-STOCK INDEX

The chart to the right shows how interest rates should affect stock prices. Point A on the line indicates that when the long-term rate is 8.8%, the S&P 500 should be 325. If the rate falls to 8.6%, then the market should rise to 334 on the S&P (point B on the line). Currently, the long-term rate is 8.2%, which means that the S&P should be 356 (point C on the line). But the S&P now is only 324 (point D, below the line). This suggests that the market is undervalued by some 32 points on the S&P, or about 220 points on the Dow Jones industrials.



▲ STANDARD & POOR'S 500-STOCK INDEX

DATA: STANDARD & POOR'S CORP., BRIDGE INFORMATION SYSTEMS INC., MORGAN STANLEY & CO., BW

crash and tiptoed back earlier in the year. Now, it's almost a stampede, and it's coming from big institutions down to the individual. Since the crash, "we've been telling investors that U.S. stocks are the least expensive assets in the world," says Beniko Tsubaki, a vice president at Salomon Brothers Asia Ltd. in Tokyo. "Now, that's beginning to change." With the newspapers full of stories about Mitsui Trust & Banking Co. and other big investors pouring several billion yen into U.S. stocks, she adds, "Japanese investors are nervous about being left out." What they're buying are the usual brand names: Boeing, Coca-Cola, General Motors, and IBM. With the rally, U.S. stocks look

like they could buy a lot more stock before they have filled their plates.

■ **Corporate investors.** Cash flow is the force that allows companies to make deals or buy back their own stock. Free cash flow—what's left over after all cash commitments are met—should grow at a solid 7% this year, says Kenneth S. Hackel, president of Systematic Financial Management Inc. Companies that don't put their cash flow to good use often become the takeover targets of those that do. Among the stocks Hackel finds attractive because of their cash flows are Georgia Gulf, Meredith, Pfizer, and Rohm & Haas.

■ **Individual investors.** The stock market's meteoric rise this year is beginning

in recession and earnings will suffer.

But as the soft landing comes into view, cyclicals could really break out. Alexander P. Paris, president of Barrington Research Associates, says heartland industrials have restructured and greatly reduced costs since the last slowdown. Among his favorites are A.M. Castle, Clark Equipment, and W.W. Grainger. Paris' prediction: The manufacturers will get through a slowdown far better than most investors think. If he's right, the rush to cyclicals will give the stock market yet another boost. But the way things are going right now, that may be just icing on the cake.

By Jeffrey M. Laderman in New York, with bureau reports

IF YOU'RE PLAYING THE SPECS, LOOK HARD AT THE TECHS

Among the stocks that could soar: Computer-graphics and video-game companies



No. The stock market hasn't been swamped by an overdose of speculative betting. Despite the 19% rise so far this year in the American Stock Exchange Index and an 18% jump in the NASDAQ Composite Index, the market's speculative fervor shows no sign of approaching the danger zone.

The reason, say market watchers, is that the small investor who usually feeds on the low-priced but risk-laden stocks has yet to join the buying spree. Institutions and foreign investors have been doing almost all the buying.

Small-capitalization stocks, where most speculative plays are found, have lots of fans—even in the big brokerage firms. Abby Joseph Cohen, Drexel Burnham Lambert Inc.'s senior investment strategist, and Burt Siegel, chief investment officer, point out that the smaller companies in the first quarter had better-than-expected earnings. In fact, they showed a higher percentage of positive earnings surprises than did the large-cap stocks in a number of sectors, including technology.

BIG JUMP. Indeed, some pros believe that the lucrative plays are to be found in the depressed technology group. Not just plain high techs, though. The juicy pickings are in the emerging-growth technology area, says Sam Navarro, managing director of technology research at Ladenburg Thalmann & Co.

Navarro is betting that companies engaged in computer graphics will be among the top winners, because more powerful microprocessors and superperformance software require higher-resolution graphics. His choice:

Tseng Laboratories, a leading designer of graphics integrated circuits or chips and printed circuit boards. These are plugged into PCs to improve the graphics and used in IBM clones, or IBM-compatible PCs. The Tseng-designed chips give PCs the capacity to produce graphics that match the quality of IBM's newer PCs, explains Navarro.

Tseng has been a strong performer, leaping from less than \$2 a share in March to more than \$5. But Navarro

insists that investors should not be turned off by the big jump. He still sees a doubling in the stock. Navarro expects revenues to jump to \$42 million this year and to \$60 million in 1990, up sharply from \$21.5 million in 1988. Earnings should rise to 42¢ a share this year and to 60¢ in 1990, up from 18¢ last year.

Tempting turnarounds in technology companies are also attracting some pros. Take NBI, a stock that was trading in the 50s in 1983 until things went suddenly

sour. A maker of computer systems for office applications, NBI started going downhill in 1984, after it had acquired an office-supply business in 1982 that put the company deep in the red. Its stock skidded below \$2 a share, where it's currently trading. "NBI is on the threshold of a major, classic turnaround," says Frederic S. Greenwald, executive vice-president of Woodmere Securities Inc.

A new management, led by President Stephen Jerri, who came aboard in June 1988, slashed NBI's expenses by 50%. Based on estimated annual sales growth of 30%, Greenwald expects earnings of \$1 to \$1.25 a share in the year ending June 30, 1989, vs. an estimated loss of \$2.50 in fiscal 1989.

Also on the comeback trail is the video-game business, which all but collapsed in 1985. The revival is being led by Nintendo Co., a Japanese manufacturer that accounts for 70% of the U.S. market. The company in 1988 sold about 5 million video-game systems in the U.S. and expects to sell another 5 million this year.

One way to play the Nintendo craze is through Acclaim Entertainment, a publisher and distributor of home entertainment products, including video-game cartridges for the Nintendo



SPECULATIVE STOCKS FOR THE DARING

Company	Business	1988-89 high	Recent price
ACCLAIM ENTERTAINMENT	Home video products	6 1/8	3 3/4
DIAGNOSTIC/RETRIEVAL SYSTEMS	Antisub warfare technology	17	7 1/4
EVEREST & JENNINGS CLASS B	Wheelchairs and medical equipment	17 1/2	11 1/8
NBI	Office computer systems	13 1/2	1 7/8
PARLUX FRAGRANCES	Fragrances and beauty products	7 7/8	5 7/8
SCAN-GRAPHICS	Hardware and software for faxes	1 5/8	56 ¢
SEITEL	Seismic data bank	8 5/8	6 5/8
TSENG LABORATORIES	Designer of integrated chips	5 1/4	5 1/2

DATA: BW SURVEY OF INVESTMENT BANKERS

entertainment System. It signed an accord with Nintendo of America early this year to market Nintendo-compatible video games. Acclaim products are distributed through large outlets, including Toys 'R' Us, Kmart, Sears Roebuck, and Wal-Mart. Acclaim has other video software products. Among them: Turbo, WrestleMania, and Airwolf.

Sales have grown from under \$1 million in fiscal 1987 to \$38.5 million in the year that ended last August and are expected to soar to nearly \$100 million this fiscal year, with earnings rising to 50¢ a share vs. 14¢ last year. One analyst believes that the stock, currently trading at 53 3/4, will hit 10 this year.

Some savvy traders are buying shares of Scan-Graphics, a maker of high-speed, continuous-feed, oversize document scanners for fax machines. The scanners are used for the transmission of documents such as engineering drawings. Scan-Graphics' products and services are marketed primarily to equipment makers and corporate customers.

THE CARDS. Scan-Graphics recently signed an agreement with GTX Corp. to supply large document scanners for its drawing processor systems. Scan-graphics was also chosen recently by IBM to be an authorized specialist under Business Partners program. Scan-graphics products will be combined with IBM hardware in its imaging systems. "The IBM decision validates Scan-Graphic's little-known scanning technology," says Kazi Hasan, director of investment at J.F. Lowe & Co.

Other companies that use Scan-Graphic scanners include Digital Equipment, American Telephone & Telegraph, and Western Union. Hasan expects the company to earn 5¢ a share in 1990, vs. a loss last year. A tripling of Scan-Graphics' stock, currently trading at 56¢ a share, is in the cards, says Hasan.

Bargain hunters are also sniffing for opportunities in another corner of the overpriced investment arena. They like Lux Fragrances, a maker of fragrances and beauty-related products, as the Anne Klein II line. Company executives have been busy buying shares, currently trading at 5 1/2%.

Management and insiders already own 68% of the nearly 2 million shares outstanding. One insider, Ilia Lekach, heads a Miami investment group, owns about 30%. He has made a bid to acquire Alfin Inc., another fragrance company, but his bid has been rejected by its board. So the whispers are that he might go after Parlux instead. Without a takeover, however, investment adviser Stephen Leeb believes the stock is worth \$12 a share based on its earnings and growth prospects.

By Gene G. Marcial in New York

Inside Wall Street

BY GENE G. MARCIAL

ARE MCA AND DISNEY READY TO CO-STAR?

Hollywood film and entertainment biggie MCA has been mentioned as a protagonist in the takeover battle for Time. But that's not why the stock jumped from 56 to 58 on June 13, and another 2 points the next day after zigzagging between 53 and 56 since early May.

True, a much-rumored buyout has failed to materialize since February, when the stock started moving from the mid-40s. But now a deal may be just around the corner. The word in April was that Sony was interested in acquiring MCA. Sony denied the report.

The latest whisper: A stock merger

makes movies, owns a cable-TV channel, and operates several theme parks.

A hostile takeover would be tough to pull off, since Wasserman owns 15.5% of the company. Along with the shares held by other insiders, management controls nearly 19%. If Wasserman announces a deal, he would be putting MCA in play. "In all likelihood, droves of friendly and unfriendly suitors would then go after the company," notes one New York investment strategist. MCA didn't return calls, and Disney declined to comment.

Lisbeth Barron, an analyst at McKinley Allsopp, thinks that, based on earnings, MCA is fully priced. Based on its assets, though, "MCA is way undervalued." Barron figures those assets are worth about \$75 a share.

HASBRO MAY LEAVE ITS FAMILY HOME

Shares of Hasbro, the world's largest toymaker, have been gyrating since February as a result of takeover rumors and the failing health of Chairman and CEO Stephen Hassenfeld (page 152). Word of Hassenfeld's hospitalization in late May bolstered talk that the Hassenfeld family, which owns 18%, would sell out. The stock, which had risen to nearly 22 in late May from 16 in February, has quieted down and is now trading at 21.

But Hasbro may start stirring again. Family representatives are said to be talking with investment bankers. Warner Communications owns 13.4% in a trust whose three trustees include Hassenfeld and his 40-year-old brother, Alan, Hasbro's president. Warner isn't interested in Hasbro, says a pro.

But, say several pros, one company does: Nintendo, the Japanese electronic toymaker. Word is that Nintendo, whose video games have gained widespread popularity in the U.S., is expected to make a \$30-to-\$35-a-share bid for Hasbro. A Hasbro spokesman declined comment.

If Stephen Hassenfeld's condition worsens, expect the stock to react. Hasbro's recent move in putting up a poison pill "only confirms that Hasbro is vulnerable to a takeover," says John Calgagnini, analyst at 13F Opportunities Report. "The company is very attractive to a lot of toymakers and other companies in related fields, such as Walt Disney," he says. Hasbro products include the popular G.I. Joe, Playskool toys for preschoolers, and Milton Bradley board games.



is in the offing between Walt Disney and MCA, similar to what Time and Warner Communications set out to do before Paramount Communications sprang its \$10.7 billion bid to buy Time.

One New York investment manager contends that MCA Chairman Lew Wasserman, who is 75, is finally thinking of relinquishing control through a friendly merger. This pro says that Disney Chairman Michael Eisner has been chatting with Wasserman for quite a while about teaming up.

The proposed deal: Each share of MCA will be entitled to at least four-fifths of one new share of Disney stock, worth roughly \$73 to \$75 a share. Disney fell 1 1/2, to 91, on the day MCA ran up 2 points. Like MCA, Disney

MOST FUNDS ARE BOOMING, BUT THE BIGGEST BANG IS IN SMALL-CAPS

Little-company funds are outperforming the S&P 500. But pity the poor gold bugs



Will the 1990s be the decade of the small company? The rumblings in mutual-fund land seem to be saying yes. For the first half of the year, 11 funds specializing in small growth companies made the top 50 list, and 6 placed in the top 10. So far this year, Morningstar Inc.'s "small company" and "aggressive growth" categories were the only fund groupings to better the Standard & Poor's 500-stock index. Morningstar's 70 small-company funds racked up a 20.8% total return—price appreciation plus dividends—vs. 19.5% for the S&P 500 through June 9. Aggressive growth funds edged the broad index, returning 19.9%.

But investors didn't have to stick to small-stock or high-risk funds. Diversified equity funds—the umbrella term for most stock mutual funds—have scored an average total return of 18.4% so far this year; last year, they dragged almost two points behind the S&P's gain.

The damper on all the good news comes for investors in funds specializing in gold and other precious metals. There's just too much bullishness around to leave much oomph for an investment that typically soars in dire times. Financial Strategic Gold's 1989 loss of 7.29% was sharp enough to make it fifth-worst among the 50 losers; on average, precious-metals funds stumbled by 1.1%.

FADING SKITTISHNESS. International funds were hammered by the strengthening dollar. Although many foreign stocks rose in their own currencies, the gains were more than offset by the declining value of those currencies. Even the popular Japan Fund, which has averaged a 19.6% total return for 10 years, wasn't immune, as its 9.29% loss put it at No. 3 among the losers. The 77 international funds tracked by Morningstar eked out a paltry 3.97% return through June 9.

In general, though, the performance of funds lent credence to the notion that the individual investor's

postcrash skittishness is beginning to fade. In 1988, people pulled a net \$3.8 billion from the equity funds' coffers. That left the funds with some \$200 billion, but it was the first such decline in 10 years. Through April, the trend is back to the plus side, with more than \$1 billion flowing in, according to the Investment Company Institute.

But the recent champs, the small-company funds, are still waiting for Mr. and Ms. Investor to wake up and buy in. For example, Twentieth Century Vista Investors ranked sixth among top performing funds with its total return of 36.35%. Even so, Vista manager Robert Puff says there has been a net outflow

of money. Overall, during the 12 months ended May 31, prices of Morningstar's small-company funds rose by more than 24%. But the assets they managed increased by just 15%—another way of saying that people are redeeming more shares than they're buying.

How come? Wayne Leizear, vice-president of AIM Distributors Inc., which sells four equity mutual funds, says it's a sign of caution: "The first step for an investor is to look for funds that concentrate in larger-capitalization stocks as a modicum of protection." Indeed, for the past couple of months, the bull market has been led by the large-capitalization stocks. That leaves many in the industry



FIXED-INCOME FUNDS

WINNERS

	Total return*
FIDELITY CONVERTIBLE SECURITIES	15.06%
PRU-BACHE INCOMEVERTIBLE PLUS	13.81
AMERICAN CAPITAL HARBOR	13.35
SBSF CONVERTIBLE SECURITIES	13.04
VANGUARD CONVERTIBLE	12.88
PUTNAM CONV. INCOME-GROWTH	11.58
HERITAGE CONV. INCOME-GROWTH	11.48
DREXEL SERIES CONVERTIBLE	11.12
CALAMOS CONVERTIBLE	11.11
DEAN WITTER CONVERTIBLE	10.92

LOSERS

	Total return*
T. ROWE PRICE INTL BOND	-11.27%
KLEINWORTH BENSON GLOBAL INC.	-8.16
AMERICAN INVESTORS INCOME	-6.58
MERRILL RETIREMENT GLOBAL BD. B	-5.81
MERRILL RETIREMENT GLOBAL BD. A	-5.53
PAINEWEBBER MASTER GLOBAL INC.	-5.24
NEW ENGLAND GLOBAL GOVT.	-4.74
SCUDDER INTERNATIONAL BOND	-4.49
INTERNATIONAL CASH PORT.	-3.71
JOHN HANCOCK WORLD FIXED-INC	-3.39

*Appreciation plus income distributions.
Dec. 31 through May 31

TAXABLE FIXED-INCOME FUND AVERAGE* 4.21 DATA: MORNINGSTAR

with the firm belief that small-cap stocks are a relative bargain.

"The momentum for small-cap stocks will last a long time," says Binkley Shortt, manager of the Over-the-counter Securities Fund. The NASDAQ issues, composed largely of small-cap stocks, take turns running ahead of and behind the S&P in cycles that last four or five years, notes Shortt. The S&P had been on top since 1983, but last year the situation began to reverse. "The major message is that smaller-cap stocks represent a much more attractive risk-reward situation than blue chips," says Charles E. Albers, manager of the Guardian Park Avenue Fund.

Harry Hutzler manages two AIM funds: Constellation, a small-cap portfolio and Weingarten Equity Fund, a broadly diversified fund, both of which have outperformed the S&P 500 in five- and ten-year periods. Historically, the price-earnings ratio of stocks in Constellation's portfolio has been about twice Weingarten's. But both funds have a p-e ratio now of about 13. Hutzler's conclusion is the same as that of Shortt and Albers: Small-cap stocks are undervalued, with a way to run yet.

'GORILLA.' Among the winners, telecommunications in general and cellular phones in particular did more than their share to boost net asset values. "MCI has been a gorilla of a stock for us," says John H. Laporte, president of T. Rowe Price New America Growth Fund. Over the past year, MCI Communications Corp. soared from about 13 to about 41. Twentieth Century Ultra's biggest holding, Cellular Communications, has risen from around 11 in late 1987 to under 40 on June 12.

In the fixed-income category (table), big winners are the convertible bond funds. Convertibles have one foot in the world of bonds, one in equities. Their returns are enjoying the best of both worlds, though not on a par with the best stock funds. For the 12 months ended May 31, convertibles have had a return averaging 13.75%, of which about 4% was income—far richer than the 4% dividend yield of the S&P 500.

Among the 10 largest equity funds, the \$9 billion Fidelity Magellan Fund had the highest. Its total return was 19.50% through June 9, according to Morningstar, and managers attribute much of the gain to a heavy position in stocks of the Federal National Mortgage Assn. Runners-up among the big were Washington Mutual Investors Fund, up 18.41% and Investment Company of America at 18.8%. Don't look for them to be messing around much with small-cap stocks. But don't let that stop you from going for funds that do.

David Zigas with Larry Light in New

EQUITY FUNDS: FIRST-HALF HEROES AND HEAVIES

LEADERS	
Fund	Total return*
Alger Small Capitalization	47.46%
Delaware Group Trend	40.94
Twentieth Century Ultra Investors	39.52
Fidelity Select Broadcasting & Media	37.52
Founders Frontier	37.47
Twentieth Century Vista Investors	36.35
Twentieth Century Giftrust Investors	36.30
Lehman Capital	36.07
Hartwell Emerging Growth	35.95
Kaufmann	35.14
Fidelity Select Telecommunications	34.86
Putnam Information Sciences Trust	34.01
Shearson Lehm. Hutton Aggr. Growth	33.95
Fidelity Select Medical Delivery	33.76
Mass. Investors Growth Stock	33.10
Philadelphia	32.94
American Telecom Trust-Growth	32.47
T. Rowe Price New America Growth	32.15
Scudder Capital Growth	32.05
IDEX II	32.01
Pasadena Growth	31.89
Fidelity Select Regional Banks	31.85
IDEX	31.80
AARP Capital Growth	31.67
Pacific Horizon Aggressive Growth	31.53
Janus Twenty	31.47
Flag Investors Emerging Growth	31.36
MFS Managed Sectors Trust	31.20
Janus	31.00
Twentieth Century Growth Investors	30.95
Bull & Bear Special Equities	30.88
Legg Mason Special Investment Trust	30.73
Financial Strategic Leisure	30.57
Oberweis Emerging Growth	30.52
Hartwell Growth	30.48
IDEX 3	30.37
Founders Growth	30.22
Founders Special	30.16
MFS Lifetime Managed Sectors	30.14
Alliance Quasar	29.91
Equity Portfolio: Growth	29.41
AMEV Special Fund	29.24
AMEV Growth Fund	29.19
IDS Growth	29.11
Oppenheimer OTC	29.04
Sherman Dean	28.94
AMEV Fiduciary	28.84
T. Rowe Price Science & Technology	28.82
Steadman Associated Fund	28.81
Financial Strategic Health Sciences	28.49

LAGGARDS	
Fund	Total return*
Merrill Lynch Pacific B	-13.01%
Merrill Lynch Pacific A	-12.67
Japan	-9.29
Keystone International	-8.82
Financial Strategic Gold	-7.29
John Hancock World Pacific Basin	-7.25
Colonial International Equity Index	-7.19
Sigma World	-6.52
Colonial Advanced Strategies Gold	-6.15
Blanchard Precious Metals	-5.70
Strategic Gold/Minerals	-5.07
United Services New Prospector	-4.96
Thomson McKinnon Prec. Met.	-4.44
Scudder Gold	-4.44
Strategic Silver	-4.40
Nomura Pacific Basin	-4.24
Benham Gold Equities Index	-4.20
Van Eck World Trends	-3.92
Lexington Goldfund	-3.65
Fidelity Pacific Basin	-3.58
Van Eck Gold/Resources	-3.56
United International Growth	-2.96
Vanguard World International Growth	-2.72
Shearson Lehman Prec. Met.	-2.59
USAA Investment Trust—Gold	-2.56
International Equity	-2.49
USAA Investment Trust International	-2.28
IDS Precious Metals	-2.28
Fidelity Overseas	-2.17
Kemper International	-1.83
Vanguard Specialized Gold/Prec. Met.	-1.78
Equity Strategies	-1.75
Fidelity Select American Gold	-1.74
Bull & Bear Gold Investors	-1.58
IDS International	-1.48
Shearson Lehman Prec. Met./Min.	-1.41
Rodney Square International Equity	-1.26
Prudential-Bache Global	-1.01
IAI International	-0.92
FT International	-0.89
Financial Strategic Pacific Basin	-0.77
First Investors Value	-0.75
IDS Strategy Pan Pacific	-0.56
DFA United Kingdom Small Company	-0.20
United Gold & Government	-0.17
Keystone Precious Metals Holdings	-0.06
Excel Midas Gold Shares	0.00
Fidelity Select Prec. Met.	0.18
Fidelity International Growth & Income	0.34
Strategic Investments	0.36

S&P 500*

ALL-EQUITY AVERAGE*

19.50%

18.41%

*Appreciation plus reinvestment of dividends through June 9

DATA: MORNINGSTAR INC.

FOREIGN BOURSES ARE CATCHING EXPORT FEVER

Investors bet on America's appetite for goods made cheaper by the dollar's rise



The mark and yen are sinking, West German and Japanese interest rates are on the rise, and China is in turmoil. You would think that global money mavens would be telling clients to stick to the safety of the U.S., right? Not exactly. Foreigners may be flocking to American stocks and bonds, but they are hardly forsaking their own markets.

Reasoning that a healthier dollar will make it cheaper for Americans to buy foreign wares, savvy stock pickers abroad are snapping up nearly anything that hints of export. For Americans, the happy news is tempered: When it comes time to sell a foreign stock, it can cost so much to swing back into dollars that the stock profit is wiped out (table).

EXPORT FEVER. Still, export-fueled economic growth may be strong enough to be worth the risk. Indeed, export fever is carrying Frankfurt's stock market to near-record highs—and some say Tokyo won't wait too long to catch up. "If Japanese companies were competitive at 125 yen to the dollar," says fund manager Gregory M. McKee at Tokyo's Yasuda Trust & Banking Co., "just think how powerful they are at 140."

With the West German mark down sharply against the dollar this year, smart investors have been buying German export stocks by the bushel. Michael Zlotnik, an analyst at Bank für Gemeinwirtschaft, likes machinery makers Hoesch, Mannesmann, and Gilde-meister, all of which registered 25% increases in incoming orders when the dollar began rising in April.

With the German economy booming, many fund managers are also buying construction companies and insurers. And while another interest rate hike by the Bundesbank could take some of the steam out of the rally, many observers

remain unfazed. "You're going to see really strong earnings," says Gerhard Eberstadt, deputy managing director of Dresdner Bank. "This will be a driving force."

Even if the dollar's surge tails off as the U.S. economy slows, many central bankers and fund managers believe that it will stabilize at a higher level than it found only two months ago. Thus, analysts say, stick with the strong-dollar theme. And be-

deeply entrenched consumer companies, including Swiss pharmaceutical giant Ciba-Geigy, retailer Carrefour, and appetizer maker Pernod Ricard of France, also favors a few technology issues among them Ericsson of Sweden and Stet and Italcable of Italy. But he suggests steering clear of auto stocks which likely will suffer from heavy Japanese competition.

Not even Britain's weary economy or dishearten these stock pickers now. Margaret Thatcher's supply-side miracle is rapidly souring, with inflation at 10% and interest rates at 15%. Not to worry, says Charles Brown, an analyst with Goldman, Sachs & Co. He likes British companies that have made multibillion-dollar U.S. acquisitions in the last two years and that now are insulated against Britain's woes.

TAKING A BREATH. Among the multinationals British money managers favor Grand Metropolitan, which owns Pillsbury Co., expects half of its profits next year to come from the U.S. Another favorite, Maxell Communications Corp., is expected to generate 90% of its earnings in the U.S. by 1990. And Michael Hughes, chief strategist at Barclays de Zet Wedd Securities, goes to conglomerate Hanson BAT Industries, which is rumored to be a Hanson takeover target.

Careful stock-picking is more important than ever in high-priced Tokyo. After rising 27% since last September, the Tokyo exchange appears to be taking a breather. Trading volume is down to a third of last summer's volume, nearly 3 billion shares a day, and Japan continues to suffer from the political crisis of the Recruit scandal. China's stock market has hurt, too: Because Japan is China's biggest lender and its biggest trade partner, some investors have been looking away for China-related real estate alone.

Still, some say the dollar's strength



cause not every market is as robust as Frankfurt's, they recommend buying along industry rather than country lines.

Capital-goods makers, basking in a worldwide investment boom, are a leading choice. Frank V. Jennings, managing director at New York's AIG Global Investors, is keen on Italian construction company Danieli, Swedish drilling-equipment company Copco, France's Schneider, and the Swedish-Swiss conglomerate Asea-Brown Boveri. Jennings is high on biotechnology, with Finland's Cultor and Australian yeast maker Burns, Philp & Co. among his top picks.

Patrizio Merciai, an analyst with Geneva's Lombard, Odier & Cie., is betting on

kes big Japanese export companies
esistible. They are selling at an aver-
e 30 times earnings, which is about
ce the price-earnings ratio for the
andard & Poor's 500-stock index but a
al by Tokyo's lofty standards. Jeff
hrenburg, market strategist with
rill Lynch Japan, suggests Canon,
achi, Matsushita Electric, and Sony.
d he and others are positive on
nda, now 23% off last summer's peak.
th 61% of its sales overseas, the auto
ker stands to cash in if the dollar
ys strong.

IT VALUE. A few daring fund manag-
even see buying opportunities in
ng Kong, where stock prices have
tered since Beijing's military clamp-
m. But that's a minority view. And
pite the China fears, analysts contin-
to be upbeat on other fast-growing
markets. AIG's Jennings suggests
rism and real estate issues in
apore and construction companies in
iland.

aura E. Luckyn-Malone, portfolio

HOW THE WORLD'S BOURSES ARE FARING

Percent change Jan. 1-June 12

	In local currency	In U.S. dollars
ANADA	12%	11%
ETHERLANDS	21	7
RANCE	14	4
RITAIN	19	-1
WEST GERMANY	9	-5
WITZERLAND	10	-6
USTRALIA	5	-9
ALY	1	-9
ONG KONG	-11	-11
PAN	5	-12
S.*	16	16

Dow Jones Industrial Average: 1000 index DATA: SALOMON BROTHERS INC.

ger with the Scudder New Asia
Inc., favors South Korea, where
sell for 12 times annual earnings
rofits are growing by 25% a year,
e some political turmoil. Scudder's
Fund Inc., a closed-end fund trad-
93% above the market value of its
lying shares, plans to sell \$50 mil-
orth of new shares in the U.S. this
er. Yes, the rising dollar has some
ational investors heading for
ca. But for many others, there
to be plenty of value left in the
f the world.

Blanca Riemer in Paris, with Michael
Bonn, Victoria English in London,
lden in Tokyo, and William Glasgall
York



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THE NEXT BEST THING TO BOND MARKET NIRVANA

So far the Fed is cooling inflation without freezing the economy—but some big ifs remain



It looked like a disaster. The May producer price index came out at a torrid 11.1% compound annual rate on Friday morning, June 9—double the market's expectations.

Yet bond investors reacted with glee, driving prices up and yields down to 8.14% from 8.29% on the 30-year Treasury bond. Why didn't the market collapse as it had in January and February when the PPI number also showed twice its projected increase? Because this time traders could cushion the news with a robust greenback, weakening commodity prices, a slowing economy, and tight money—all portending less inflation in the future.

Indeed, investors worldwide are singing hosannas to the Federal Reserve Board. "The conventional wisdom is that the Fed has never navigated a soft landing," says David H. Resler, chief economist at Nomura Securities International Inc. Until now. The Fed looks to have dampened inflation without chilling the economy into a recession. Interest rates are likely to move lower as the Fed eases. Says August Arace, vice-president at Tucker, Anthony Inc.: "The tide has turned. The disinflationary environment has been reaffirmed."

Also reaffirmed is the importance of monetarist principles in guiding Fed policy and shaping investor expectations. "Fed Chairman Alan Greenspan believes that in the long run, monetarism still works," says Edward E. Yardeni, economist at Prudential-Bache Securities Inc. And money supply growth has been milder for well over a year—hardly fertile soil for inflation (chart, page 104).

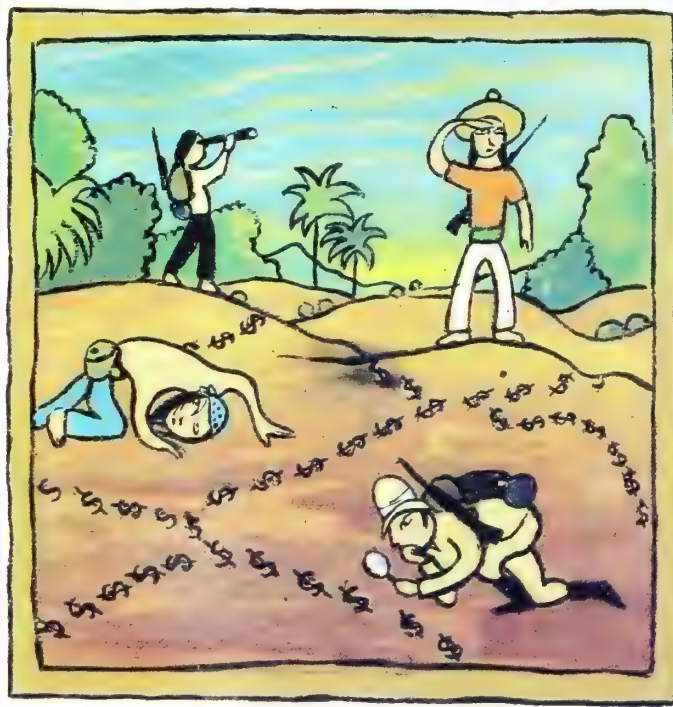
Indeed, an esoteric new Fed indicator called P-star (P^*) looks to be resurrecting orthodox monetarist ideas, which assume that the price level ultimately depends on the money stock. The P^*

refinement divines inflationary pressures by calculating the long-run price level consistent with a given level of money supply. The calculus doesn't predict inflation rates but whether inflationary forces are mounting or ebbing. Inflationary pressures tend to surge if P^* is above the current price level, and vice versa. Right now, it looks as if P^* will soon converge with actual prices for the first time since 1985—a signal that inflationary pressures are abating.

trend looks good. But current bond market conditions assume that little will be wrong from here on—a risky proposition when unforeseen events can change volatile market psychology overnight. Beware: Mortgage rates are below 10%, and the prime rate is heading south of 11%. That could reignite a consumer spending boom and stoke inflation, which would send interest rates higher again. Bond investors could take fright if the Fed is perceived as easing too aggressively.

stagflation bind could develop if tight money stifles growth faster than it chokes inflation. And the dollar's fortunes in foreign exchange markets are a wild card.

NO CREDIT RISK. Nervous? Here are some bond market picks. "We're sitting on the fence," says Ian A. MacKinnon, senior vice-president at mutual fund company Vanguard Group. MacKinnon has changed his fixed-income portfolios into a market-neutral posture. For example, his long-term Treasury portfolio averages 9½ years. If yields were less skittish, he would extend that fund to 12 years. William H. Gross, Pacific Investment Management Co. is somewhat more optimistic. He believes the fundamentals point to lower interest rates in the short term. But after a spectacular rally that pushed yields from



Money managers are cheering. "I'm just sitting back and enjoying the appreciation in bond prices," says Dale B. Krieger, head of New York-based Carnegie Hill Asset Management. "And there'll be more time to enjoy this rally." Japanese investors agree, by some estimates snapping up \$3 billion in 30-year Treasury bonds on June 9 alone. Economist Yardeni expects that Treasury bond yields will drift down to the 5% range by 1993. And many less-optimistic firms, including Salomon Brothers Inc., predict a 7.5% yield by yearend.

Does all this add up to bond investor nirvana? Not quite. True, the long-run

the 9% level to near 8% in a few weeks, investors can expect periodic bout of nerve-racking interest rate hikes.

What's the best strategy to pursue? Treasury securities are most money managers' favored investment. If you own bonds, sit back and count your blessings. If you don't, "it's time to look for an opportunity to buy at lower prices and higher yields," says Pacific's Gross. For individuals willing to put their hard-earned money at risk for more than a few months, medium-term Treasury notes look most attractive. Five-year Treasury notes now yield 8.26%, and 10-year Treasury notes yield 8.21%. Those rates are comparable

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long-term bond yields, but prices are less volatile because these securities are exposed to the ravages of inflation for far fewer years. And, of course, there's no credit-risk worry with Treasury securities if a recession does strike.

Investors eager to tap a slightly higher income stream might want to check out Government National Mortgage Assn. securities. Better known as Ginnie Maes, these bonds are created by pooling individual mortgages insured by the Federal Housing Administration or guaranteed by the Veterans Administration and the Farmers Home Administration. Interest and principal are paid out of the cash flow from the underlying mortgages. Timely payment on Ginnie Maes is backed by the full faith and credit of the U.S. Many Ginnie Maes yield about 1.25 percentage points more than comparable Treasuries.

What about the tax-exempt securities of state and local governments? The investment picture here is decidedly mixed. In the municipal market, yields on general-obligation bond issues hover around 6.8%, and A-rated revenue bonds yield 7.2%. Those yields translate into 9.4% and 10% for someone in the 28% tax bracket. Not bad. The same can't be said for shorter-term munis, however. Strong demand by corporations in the 34% tax bracket, and eager buying by individuals edgy about the long-run inflation outlook have driven yields down to unappetizing levels. "The individual investor will get a better yield on taxable Treasury securities," says Peter J.D. Gordon, head of municipal bonds for T. Rowe Price Associates Inc.

'EVENT RISK.' Turning from the public sector to the private economy, corporate bonds in general do not excite many institutional investors. The wholesale substitution of debt for equity in the 1980s is beginning to take its toll. According to Merrill Lynch & Co., net interest payments by nonfinancial corporations absorbed an estimated 27.3% of cash flow in the first quarter of 1989. That's sharply higher than the 18.5% level a mere four years ago and almost equal to the record 27.4% drain during the 1974-75 recession. Clearly, despite the reprieve of lower interest rates right now, it doesn't take a Cassandra to see that debt will be a burden in an economic slowdown.

Indeed, with corporate restruc-

turings on the upswing after a fallow winter, the leveraging trend will continue. Specifically, the takeover imbroglio between Time, Warner, and Paramount (with goodness knows who else ready to join the fray) has once again focused investor attention on "event risk." That's Wall Street lingo for the mug-

ging corporate bond investors get when their investment-grade company suddenly becomes a candidate for junk-bond status. Prices of blue-chip corporate bonds typically plummet at the prospect of a pristine balance sheet being abruptly marred by billions in new debt.

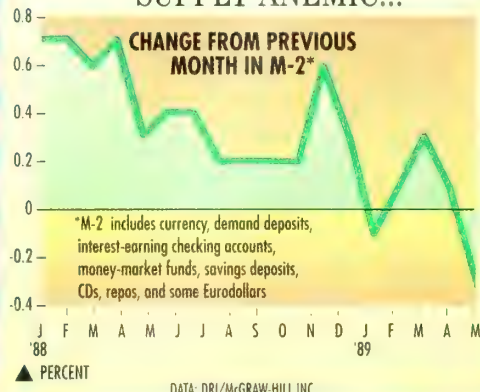
Some investment-grade companies such as Caterpillar, Grumman, and Federal Express, have adopted "poison put" bond covenants. These legally pledge the issuer to limit investor losses in any future corporate upheaval. Generally, however, investors in blue-chip industrial debt "are still not adequately compensated for the risk of a takeover or other restructuring," says John V. Malvey, head of corporate bond research at Kidder Peabody & Co. Moreover, they expect that many companies that issued bonds several years ago at higher rates will call them shortly—which puts a lid on their prices.

FINANCE TOOL. Then there are junk bonds. These less-than-investment-grade securities are yielding mouthwatering five percentage points or so above Treasuries. Of course, it's a market axiom that those steep rates mean big risk. The danger is widespread default by junk bond companies during a recession. J. Thomas Madden and his colleague Mark Durbiano, who manage more than \$750 million in corporate bonds for mutual fund operator Federated Research Corp., say they're ready. They favor junk issues by companies able to withstand a recession. Among them: RJR Nabisco, Decca, and Harcourt Brace Jovanovich. But Madden and Durbiano are avoiding consumer cyclical stocks as Federated Department Store and Allied Stores. "Bring on the recession," says Madden.

Whether or not Madden gets his wish, all signs suggest that the bond market's disinflation hysteria are not misplaced. "Most Americans today, knowingly or not, depend on the bond market to finance their retirement, their hospitals, their schools, their jobs, their productivity, their defense," wrotes late and legendary Sidney Hox of Salomon Brothers back in 1977. As long as inflation is dwindling and bond prices are strengthening, all that financing can be done cheaply—not to mention more profitably for investors.

By Christopher Farrell in New York

WITH THE MONEY SUPPLY ANEMIC...



...AND COMMODITY PRICES HEADING LOWER...



...LONG-TERM INTEREST RATES ARE FALLING





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THE BEIJING FACTOR MAKES THIS THE YEAR OF THE SLIDE

But some commodity traders see the current declines as a short-term buying opportunity



Normally, the news that came on June 5—that the U.S. had agreed to sell nearly 2 million tons of wheat to China—would have caused futures traders to rejoice.

But when that announcement came this year, it was on the day after at least 500 pro-democracy Chinese protesters were killed by soldiers in Beijing. Wheat traders, suddenly worried that violence-torn China would be unable to follow through on its buying commitment, began dumping. As a result, July wheat-contract trading at the Chicago Board of Trade closed at \$3.88 per bushel, down 6½¢.

The panic over China spread quickly to futures markets in New York. Sugar prices on the Coffee, Sugar & Cocoa Exchange also dropped sharply. Rumors spread that China would not proceed with the planned purchase of 50,000 tons of raw sugar. And cotton prices fell by the maximum daily limit on the New York Cotton Exchange. Since last August, China has imported some 646,000 bales of cotton from the U.S., and is this nation's second largest cotton customer, behind Japan.

STRONG STOMACHS. The pandemonium in China has forced commodity traders to make wrenching decisions—without the benefit of solid information. Many futures prices already have taken a hit since the trouble started in mid-May. The question now is whether commodity prices have fallen as far as they're likely to go. Investors with strong stomachs who believe that such is the case are embracing the price declines as short-term buying opportunities.

Looking for commodities on the rebound, analysts pinpoint sugar as the best buying opportunity of the summer. Tom Lowsley, research director at Merrill Lynch Futures in New York, says sugar prices could rise nearly 50% if normal Chinese commerce resumes.

currencies—particularly the yen—in futures or options markets. "There's a feeling that the Japanese are the most involved of the major countries to trade with China," says Trevor Woodland, vice-president at Harris Bank in Chicago. "There's considerable interest out-

Asia to buy the dollar." Nomad money manager Dinesh Desai in Mountain View, Calif.: "The dollar still has quite a ways to go on the upside."

WILD CARD. Since the violence began in China, the dollar has risen about 7% against the yen in futures trading on the International Monetary Market of the Chicago Mercantile Exchange. Even when an unfavorable producer price index report was released on June 1, Treasury bonds and the dollar both rallied. Says Dora Howe, a Chase Manhattan Bank bond analyst: "This is one of those classic cases where people said, 'I don't care what the PPI is, I'm buying anyway.'"

The China factor has been responsible for some of the wildest trading days in recent government bond pits during the past year. The combination of a slowing U.S. economy and the influx of foreign money sent T-bonds to their highest levels in two years, as yields tumbled to 8.2%.

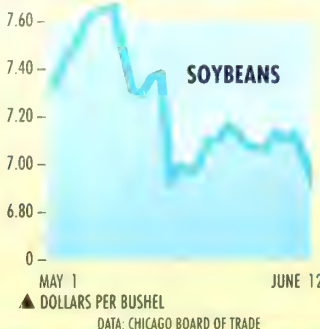
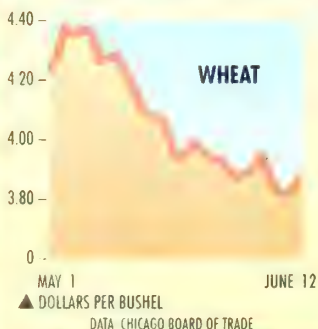
The other major wild card for agricultural commodities is, of course, the



Sugar is "going to make a big move up," adds Peter Borish, research director at Tudor Group, a money management company.

Most traders think that the U.S. dollar will continue to glitter. To bet on the greenback, they are shorting foreign

THE TURMOIL IN CHINA PLAYS HAVOC WITH COMMODITIES





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weather. In 1988, the prolonged U.S. drought coupled with 100F heat withered crops in the fields and catalyzed the biggest boom in agricultural futures in 5 years.

Worldwide supplies of wheat are the tightest since 1973. Sugar supplies also are tight. And the lack of rain in the Western plains from September, 1988, to May meant a bad winter wheat harvest and continued short supplies.

"The grain market has been an absolute classic post-drought market," observes Richard A. Brock at Brock & Associates in Milwaukee. "The Greed Phase was last summer. The Wishful Thinking Phase was last winter when everybody thought we'd have another drought."

SELLING SPREE. Right now, corn is selling for \$2.49 a bushel. Investors who remember last summer's highs of \$3.50 a bushel for December corn are hoping another drought might push prices a lot higher. If a hot, dry summer doesn't materialize, they'll sell off, analysts say. Brock expects an early selling spree in corn and soybeans this summer, with lows coming as early as late July. Why? The corn and soybean belt of the central Midwestern states continues to get rain.

In some areas, there has been too much rain. Downpours in the eastern part of the Corn Belt have delayed planting. If the rains don't stop soon, production in states such as Ohio and Indiana could be down, giving some boost to corn prices.

After a sharp climb in April in the wake of the Exxon Valdez oil spill and unrest in Panama, oil prices have leveled off and appear to be headed down. Some traders expect crude to fall, to \$15 a barrel from today's \$20. They point to OPEC's inability to agree on production during its spring meeting. "Crude oil has had everything going for it the last few months. Now those factors have gone by the board," says Lowsley.

The slowing economy has knocked the prop out from under metals. Copper, for example, has fallen to \$1.08 a pound compared to \$1.52 at the beginning of the year. Slower growth and the surging dollar are also hitting precious metals despite the upheaval in China. Gold, usually a big gainer during political crises in foreign countries, is down to \$360 an ounce from \$410 back in early January and \$360 just two months ago.

Whether or not the turmoil in China subsides is anyone's guess. But what is clear is that the China factor has introduced a new element of risk into the already dangerous commodity pits.

By David Greising in Chicago

THE TROUBLE IN CHINA ISN'T SCARING OFF THIS TRADER

Daniel C. Henning has a lot more at stake than most Americans in what is happening in China. This year, Henning, president of the Chicago-based commodities firm, Henning-Krajewski Trading Co., had planned to visit Beijing to meet with government officials. He hoped to win them as clients who would trade through his firm in U.S. futures markets to hedge against the changing prices for agricultural commodities,

his own trades. He has had good luck in the pits: In 1977, he met Deborah Roach, then a floor manager for Kipnis & Co., and they were married in 1979.

Henning had planned shrewdly for his move into China. His company's chief representative in Taiwan is Alfred H. Gruetzmacher, 69, who made contact with the Chinese when he was chairman of the CBT back in 1980. And he had been in touch with agriculture officials before the upheaval.



HENNING IN CHICAGO: "WE'RE WAITING FOR THE FIRES TO BURN DOWN A LITTLE"

much the same as U.S. grain companies do. But the turmoil that began in China in mid-May and the subsequent bloodshed have put his plans on hold. "We'd still like to make those contacts," says Henning, 44. "We're waiting for the fires to burn down a little."

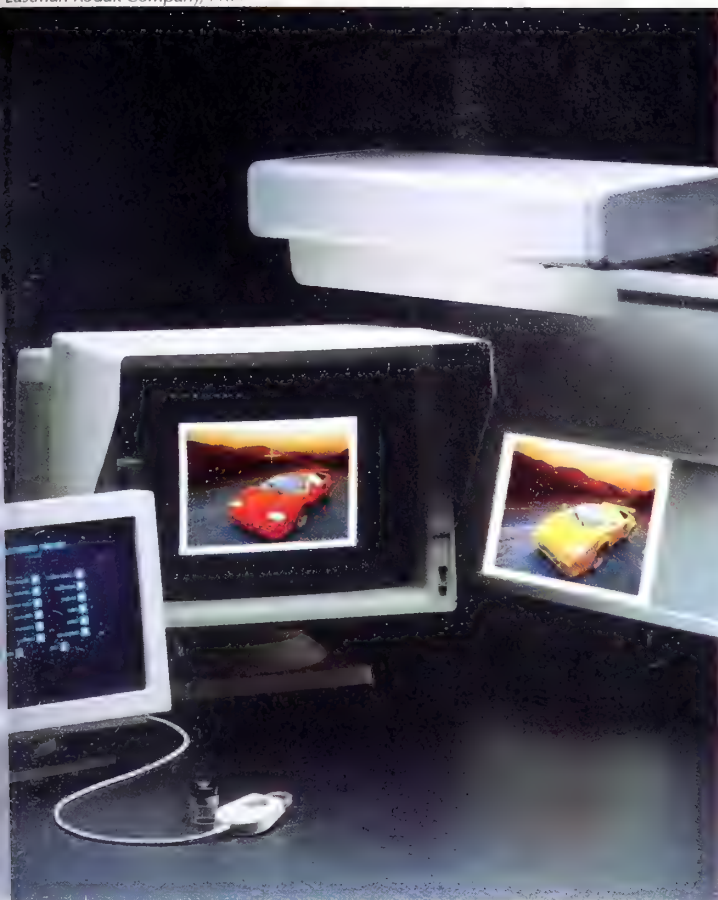
Henning sees China as a crucial step in his company's Asian development. Last October, his firm opened offices in Tokyo and Taiwan. The notion of worldwide free markets has advanced to a point where even a medium-size firm such as his, with 150 employees and 500 trading accounts, could hope to establish a foothold in mainland China.

LOVE IN THE PITS. Henning has always thought big. As a native of Glen Ellyn, a Chicago suburb, he had long been attracted by the futures business. In 1972, after four years of working for other firms at the Chicago Board of Trade, he borrowed \$42,000 from associates to trade for himself. By 1974, he had enough capital to begin clearing

Many traders have been worried that the turmoil would reduce China's demand for wheat, soybeans, and corn, and even that the White House might feel compelled to impose an embargo on grain exports to China. But while such fears have sparked selling that sent prices tumbling, Henning is confident that the market will not fall prey to continuous panic-selling. "The wheat market is pretty orderly," he says. "The market is there to digest the news, and that's what it has done."

At the CBT, wheat futures fell from \$4.28 per bushel on May 11 to \$3.89 on June 12, and there was no single day when it came close to falling by the trading limit of 20¢. "If the market was really concerned that there was going to be a revolution in China," says Henning, "and it was going to interfere with long-term trade relations, then the market would have reacted more severely."

By David Greising in Chicago



The arts of page makeup, color separating and color correcting are all becoming part of computer science. Once again, Kodak leads.

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be accomplished on the screen of a computer. And, a state-of-the-art color system permits image manipulation—a truly magical ability to enhance photographs and artwork—with equal ease.

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THE PUBLIC IS SKITTISH ABOUT THE MARKETS

Americans are fairly anxious about the economy as a whole, and they're particularly skeptical about the markets. The public is gloomy about unemployment, interest rates, recession, and, especially, inflation. Fully 64% expect prices to start rising quickly in the next year. That's up from 54% the last time we asked that question, in April, 1988. And the public missed some bullish news: Despite the Dow's nearly 350-point rise, the vast majority of the public believes the stock market hasn't gone up



much, if at all, in the past six months.

That may be why so few think stocks or mutual funds are a good investment. A growing perception that the market is rigged against the little guy doesn't help. Now, 68% of Americans think small investors don't stand a chance on Wall Street—up from 52% in 1986. And the public has been shying away from the market. Although 31% have owned stocks or mutual funds in the past two years, only 15% say they have made such investments in the past year.

WHERE IS THE ECONOMY HEADED?

■ A year from now, as a result of economic conditions, do you feel or not that . . . ?

	Yes	No	Not sure
1. Prices will be going up much faster	64%	33%	3%
2. Unemployment will start to go up again	55%	42%	3%
3. Interest rates will begin to climb again	69%	26%	5%
4. You will be more cautious in spending as a consumer	78%	20%	2%
5. The country will be going into another recession	44%	49%	7%

WHAT'S THE MARKET BEEN DOING?

■ Is it your impression that over the past six months the stock market has gone up a lot, only a little, stayed about the same, or gone down?	Gone up a lot	17%
	Only a little	29%
	Stayed about the same	33%
	Gone down	9%
	Not sure	12%

HOW WILL IT FARE OVER THE NEXT YEAR?

■ Over the next year, do you think stocks will go up, stay about the same, or go down?

	Oct. '87	Apr. '88	June '89
Go up	50%	29%	36%
Stay about the same	31%	42%	38%
Go down	12%	20%	18%
Not sure	7%	9%	8%

HAVE YOU OWNED STOCK IN THE PAST TWO YEARS?

■ Have you owned common stock or shares in a mutual fund at any time in the past two years, or not?		Sept. '86	June '89
	Owned	20%	31%
	Not owned	79%	68%
	Not sure	1%	1%

HAVE YOU BOUGHT INTO THE MARKET LATELY?

■ Have you bought common stocks or shares in a mutual fund within the past year, or not?	Have bought	15%
	Have not bought	84%
	Not sure	1%

WHAT'S THE BEST INVESTMENT TODAY?

■ If you had to choose the one investment that you think would be the best to make right now, which would it be?	Government bonds	15%
	Money-market funds	11%
	Bank and savings & loan deposits	8%
	Real estate	40%
	Gold or other precious metals . .	8%
	Not sure	2%
	Common stock	5%
	Mutual funds	8%
	Corporate bonds	3%

IS ANOTHER CRASH LIKELY?

■ Over the next 12 months, how likely do you think the chance of another big crash in the stock market is? Is it very, likely, somewhat likely, not very likely, or not likely?	Very likely	12%
	Somewhat likely	28%
	Not very likely	40%
	Not likely at all	17%
	Not sure	3%

DOES THE SMALL INVESTOR HAVE A CHANCE?

■ Do you think that an individual investor gets treated fairly on Wall Street or do you think that an individual doesn't stand a chance against the big institutional traders and market professionals?

	Sept. '86	June '89
Gets treated fairly	31%	23%
Doesn't stand a chance	52%	68%
Not sure	17%	9%

HAVE THE FEDS CLEANED UP THE MARKETS?

■ As you probably know, the government has prosecuted a number of people who work on Wall Street for insider trading over the past few years. How effective do you feel these efforts have been in cleaning up the stock market—very effective, somewhat effective, not very effective, or not effective at all?	Very effective	6%
	Somewhat effective	48%
	Not very effective	29%
	Not effective at all	12%
	Not sure	5%

DO YOU TRUST WALL STREET'S BIGWIGS?

■ As far as people in charge of running Wall Street are concerned, would you say you have a great deal of confidence, only some confidence, only some confidence, or hardly any confidence at all in them?	Great deal of confidence	8%
	Only some confidence	56%
	Hardly any confidence at all . .	31%
	Not sure	5%

WHAT MOTIVATES YOU TO INVEST?

■ What are the main reasons why you invest and save—to have a nest egg, to add to your retirement funds from Social Security or a pension plan, for mounting medical costs over and above your insurance, as a way to keep ahead of future inflation, have money to send your children to college, to buy a new car or house, or to make a quick killing in the market?	To have a nest egg	38%
	To add to retirement	47%
	For mounting medical costs . .	14%
	Way to keep ahead of inflation	19%
	For college education	24%
	To buy a car or house	22%
	To make a quick killing in the market	4%
	Not applicable	4%
	Not sure	1%

Edited by Mark N. Vamos

Poll of 1,249 adults conducted on June 2-6, 1989. Prior polls cited were conducted as follows: 1,255 adults on Sept. 15-16, 1986; 1,250 adults on Oct. 23-25, 1987; 1,250 adults on Apr. 1-5, 1988. Surveys were conducted by Louis Harris & Associates for BUSINESS WEEK. Overall results should be accurate to within three percentage points.



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THE BEST OF 1989 SO FAR

▶ CELLULAR PHONES ARE THE RAGE — AND SO IS THE STOCK GROUP

◀ KEN TROPIN'S COMMODITIES FUND THRIVED IN A DIFFICULT YEAR



▶ SIERRA'S 208% GAIN IN 1989 PUTS IT ON THE TOP RUNG OF AMEX STOCKS



▲ ON THE BIG BOARD, L. A. GEAR'S SHOWING IS EASILY THE BEST



In contrast to the hand-wringing anxiety that dominated the investment world a year ago, 1989 is shaping up in sprightly fashion. Lofty earnings expectations are fueling speculative fervor, and small-capitalization stocks are on the march—two themes that dominate this compilation of the best investments of the year to date.

BEST NYSE STOCK

L. A. Gear Inc. sneakers have a devoted following among fashion-conscious teens—and a gaggle of more elderly fans on Wall Street. Its stock has climbed 10 times in value since 1986, and this year has risen 176%, easily the best performance of any New York Stock Exchange issue. Investors are betting that L. A. Gear's growth days aren't over.

The stock's joyride, however, is derided by critics, including a small army of short-sellers. If they're right, L. A. Gear stockholders should forget about foot-wear and put on crash helmets.

BEST AMEX STOCK

Health maintenance organizations are on the rebound—as indicated by the appearance of two HMO companies on the roster of best investments of 1989. The stock of Sierra Health Services Inc. has climbed 208%, to 5, since the beginning of the year, the best performance of any American Stock Exchange stock.

Like many HMO companies, Sierra erred by overexpanding in its early years. But it has shed laggard units and is beginning to creep into profitability. Earnings more than doubled in the first quarter—a hopeful sign for the future. Alas, investors who bought into Sierra at the public offering in 1985 have yet to rejoice. They paid \$12.50 a share.

BEST OTC STOCK

As its name implies, HMO America Inc. operates a health maintenance organization in America—Chicago, to be exact. It is the holding company for Chicago HMO, one of the Windy City's leading medical groups. In 1988, the company recorded a loss of \$11.2 million on revenues of

\$104.7 million, and by yearend its common stock was trading at 94¢—about one-tenth of its price in early 1987.

But HMO America may be back on track. It turned a profit in the first quarter, and its shares have climbed 733%, 7¼, since Dec. 30. HMO America Vice President David B. Citron notes that health insurance rates in the Chicago area are rising, giving the HMO breathing room to hike its rates.

BEST STOCK GROUP

Judging from the performance of cellular telephone companies' stocks, you think that the ability to dial telephone in the great outdoors is as vital as mother's milk. Telephone services companies—chiefly cellular outfits—have recorded the best performance of a stock group compiled by Bridge Information Systems Inc. The group has risen some 46% since Dec. 30.

The leader of the pack has been British cellular company, Racal Telecommunications PLC, whose American Depository Shares have climbed 133% this year. Other gainers in the group have been Motorola



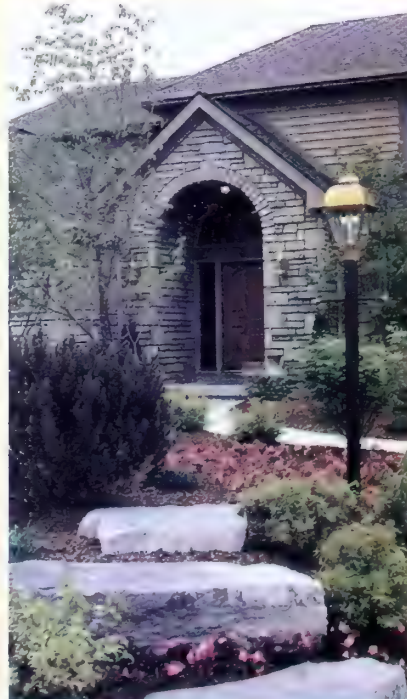
DAVID ALGER'S
SMALL-CAP EQUITY
FUND LEADS
THE PACK



THE STRONGEST REAL
ESTATE MARKET WAS
COLUMBUS, OHIO



UNLEADED
GASOLINE LED
ALL COMMODITY
FUTURES



AN HMO STOCK
WAS THE BEST
OVER-THE-COUNTER
PERFORMER

HMO AMERICA, Inc.

CTS Inc. and McCaw Cellular Communications Inc.

MUTUAL FUND MANAGER

Alger isn't perfect. He recently sold his positions in cellular phone stocks, for example, before they peaked. He is a member of the Alger Small Capital Fund, which he manages, have climbed 47% since 1993, making it the best equity mutual fund of the year to date. Alger maintains a diversified portfolio of small-cap stocks, none making up more than 4% of total holdings. Thus he has not latched onto the rally in any issues. His more successful investments include FHP International, a Florida-based operator of HMOs, and a restaurant chain. Alger believes the good times are not yet over: "I think the market will reach 4000 by the end of 1994."

COMMODITY FUND MANAGER

There has been a mixed year for traders in commodity futures. Of all the com-

modities funds that have managed to make the best of things, none has surpassed the LaSalle Street Futures Fund, managed by John W. Henry & Co. of Newport Beach, Calif. The fund realized a 63.2% percent return through May 31, the highest of the 156 publicly offered futures funds tracked by *Managed Account Reports* newsletter.

Much of the fund's gain was realized from trades in currency, crude oil, and stock-index futures. Fund manager John W. Henry notes that the fund does much of its trading abroad, in such out-of-the-way exchanges as Sydney. Also unusual is the fund's long-term approach: It holds some positions as long as two years and uses data "going back as far as the late 1800s," observes Kenneth G. Tropin, president of Henry & Co.

BEST COMMODITIES FUTURE

Bad news for motorists means jolly tidings in the commodities trading pits. Unleaded gasoline futures prices have jumped 41% since Dec. 30, from 47.9¢ to 67.4¢ a gallon. The Exxon Valdez oil spill and production problems in the North

Sea contributed to this runup in prices.

But the gas rally may be out of gas. Prices have been on the decline since April and are likely to continue to slide. "Gasoline can easily go down by about 20%. The market has topped out," asserts Dinesh Desai of Desai & Co., a commodities trading firm.

BEST REAL ESTATE MARKET

For most folks, their best investment is right around them—their home. And that has certainly been the case in the heartland of America: the Columbus (Ohio) metropolitan area. According to the Federal Home Loan Bank Board, home sale prices there rose on average from \$89,000 in December to \$123,000 in May, a 38% gain. Columbus' economy has generated more than 20,000 new jobs a year over the past five years. Unlike cities that depend on heavy industry, Columbus is not as susceptible to economic swings—and the resulting layoffs that send real estate prices into a tailspin.

By Gary Weiss in New York, with bureau reports

THE WORLD'S BIGGEST BANKS ENJOYED A BOUNTIFUL YEAR

Japan's powerhouses dominated the scene, but there were profits everywhere

When it comes to ranking the biggest banks in the world, there are the big ones—and then there are the Japanese. In the past few years, Japan's banks have ridden an exploding economy and a surging yen to take the uppermost echelon of the world of money. As BUSINESS WEEK's annual International Bank Scoreboard shows, the past year was no exception. And the Japanese show no signs of slowing their powerful growth machine.

The power of Japanese money is awesome indeed. Led by Dai-Ichi Kangyo Bank, with a mind-boggling \$384 billion in assets and a stock market value of nearly \$69 billion, the Japanese took 8 of the Scoreboard's top 10 slots. In so doing, they bumped Citicorp to 10th place, from No. 7 in 1988. But even with the Japanese drive for market share, there were plenty of profits to go around.

The 1989 International Bank Scoreboard, prepared for BUSINESS WEEK by London's IBCA Banking Analysis Ltd., shows who grew the fastest and who is worth the most on the world's stock exchanges. The results jibe with long-time gripes by Western competitors that the Japanese would rather gain market share than build up profits and capital. Indeed, the Japanese banks still had to turn to Tokyo's pumped-up stock market over the past year to boost profits. Bedeviled at home by financial deregulation, rising interest rates, and big bond-trading losses, big Japanese banks sold off at least \$8 billion worth of corporate stock, which they bought cheap and had owned for years.

Western banks generally lack such a cushion. For them, 1989 won't be as fat as previous years. In much of the world, rising interest rates are squeezing bank earnings. Competition within the European Community is heating up



as the EC prepares to drop all internal barriers to trade and capital flows. Says Cr dit Suisse Chairman Rainer E. Gut: "We are entering into troubled seas."

MORE CAPITAL. If the global banking business is expecting a leaner year, at least it's better fortified than it was a few years ago. Most big banks now meet new capital standards adopted by the industrial countries last year. But to continue to abide by the new rules, banks will have to raise even more capital if they want to keep growing. By showing which banks earn the highest returns on their assets and equity—the best measures of continued strength—the International Bank Scoreboard helps gauge their ability to amass new

capital and to support expansion. By adjusting turns on equity for differences in capital ratios, national inflation and rates, the Scoreboard gets behind the figures to measure earnings quality. The result, an index of "profitability," shows how each bank would stand if operated under similar conditions.

While many banks close in the profitability rankings, some stand out. Among the 50 large banks, the most profitable is J. P. Morgan & Co. with scores 1.221 on the index—the same company as London's Lloyds Bank. Most others fell considerably below those performers. But some of the most profitable banks aren't in the top 50. Ohio's Bank

Corp., with an index rating of 1.25, is the most profitable in the U.S., largely because of its lucrative consumer business and its lack of foreign loans. In assets, it ranks 149 in the world. Even after taking profits on stock sales, Japanese banks rank far lower, with most around 1.1 or below.

If many global banks expect a tougher 1989, at least developing countries pose less of a problem. U.S. banks alone disposed of \$11 billion worth of LDC debt in 1988, says IBCA Managing Director Robin Monroe-Davies, and they intend to do the same this year. In fact, bankers don't seem too worried about bad news from developing industrial countries. With economic growth healthy, and with balance sheets reinforced, the banking industry's appetite for new challenges is increasing again. As banks around the world battle it out in new fields—and the Japanese press ahead—expect a scramble for position on the 1990 Scoreboard to heat up by the week.

By William Glasgall in New York, bureau reports

Interest rates and European deregulation will make things tougher for Western banks in 1989

INTERNATIONAL BANK SCOREBOARD

		ASSETS		PERFORMANCE		MKT. VALUE	
		\$ MIL.	CHANGE FROM 1987 %	NET INCOME \$ MIL.	CHANGE FROM 1987 %	REAL PROFIT- ABILITY	5/31/89 \$ MIL.
DAI-ICHI KANGYO BANK (a)	Japan	383,767.8	10.40	1,360.1	28.00	1.095	68,859
FUMITOMO BANK (a)	Japan	368,981.8	13.57	1,500.0	69.20	1.110	71,341
FUJIBANK (a)	Japan	354,026.5	12.22	1,301.1	27.50	1.097	66,604
MITSUBISHI BANK (a)	Japan	346,169.4	11.10	1,266.3	31.20	1.097	61,313
DAIWA BANK (a)	Japan	338,399.4	12.82	1,176.2	28.80	1.094	50,823
INDUSTRIAL BANK OF JAPAN (a)	Japan	259,509.1	8.01	707.3	18.70	1.069	73,903
RIORINCHUKIN BANK (a)	Japan	243,761.7	5.21	308.6	12.50	1.043	NT
DAIKAI BANK (a)	Japan	222,879.7	6.21	455.4	14.00	1.054	31,463
CREDIT AGRICOLE	France	210,595.8	-2.85	643.7	39.80	1.047	NT
WATFICORP	U. S.	207,666.0	1.99	1,858.0	NM	1.150	9,602
FUJITSUI BANK (a)	Japan	205,053.7	5.90	600.6	23.70	1.077	30,424
MITSUBANK OF TOKYO (a)	Japan	199,735.2	22.86	472.0	22.30	1.055	23,732
PARIS BANQUE NATIONALE DE PARIS	France	196,954.8	7.82	534.6	-5.10	1.059	NT
BARCLAYS	Britain	189,368.4	15.86	1,616.0	313.60	1.144	8,485
CREDIT LYONNAIS	France	178,877.5	6.26	356.2	-19.30	1.043	NT
NATIONAL WESTMINSTER BANK	Britain	178,505.2	10.25	1,708.3	111.10	1.157	7,895
DAIWA KOBEN BANK (a)	Japan	174,972.8	5.02	404.7	22.90	1.062	17,689
LONG-TERM CREDIT BANK OF JAPAN (a)	Japan	173,630.9	4.05	535.6	31.90	1.079	33,687
MITSUBISHI TRUST & BANKING (a)	Japan	172,906.2	9.38	587.0	12.70	1.079	25,728
DEUTSCHE BANK	West Germany	167,133.3	0.81	675.6	59.70	1.089	9,892
FUJITSU TRUST & BANKING (a)	Japan	161,171.7	15.14	556.7	10.80	1.082	23,616
SAFARI GENERALE	France	155,482.9	1.61	590.5	17.70	1.085	4,496
FUJITSU TRUST & BANKING (a)	Japan	143,624.1	6.64	458.4	12.50	1.075	18,016
RESIDNER BANK	West Germany	127,312.1	-1.30	291.6	-1.10	1.049	4,607
DAIWA BANK (a)	Japan	123,272.3	10.30	295.8	5.70	1.054	16,688
PARIBAS GROUP	France	121,617.4	-0.54	732.5	18.90	1.114	4,455
SHIMIZU CREDIT BANK (a)	Japan	119,675.5	8.84	287.4	17.00	1.065	17,743
DAIWA TRUST & BANKING (a)	Japan	117,854.8	8.33	396.4	17.20	1.079	12,672
HONGKONG & SHANGHAI BANKING	Hong Kong	113,151.2	6.60	634.7	7.80	1.056	4,618
SWISS BANK OF SWITZERLAND	Switzerland	109,396.8	-12.18	517.5	-12.40	1.087	8,219
DAIWA BANK (a)	Japan	104,999.2	1.83	273.1	1.60	1.067	11,912
SAFARI BANK	Switzerland	101,487.6	-10.48	448.9	-12.30	1.081	6,122
ISLAND BANK	Britain	100,848.7	11.88	760.0	NM	1.111	4,355
IMMERZBANK	West Germany	99,633.6	-0.94	275.0	2.80	1.064	2,528
MIN OF CHINA	China	97,827.5	20.13	1,135.0	9.00	1.064	NT
CHASE MANHATTAN	U. S.	97,455.1	-1.76	1,058.9	NM	1.159	3,206
DAIWA BANK (a)	Japan	96,851.0	11.29	219.4	14.60	1.060	10,986
WELLS FARGO	U. S.	94,647.0	1.95	726.0	NM	1.098	4,754
WYDS BANK	Britain	93,800.2	12.26	1,118.3	NM	1.220	4,919
DAIWA TRUST & BANKING (a)	Japan	91,924.4	9.25	310.1	3.20	1.080	11,373
DAIWA CHUKIN BANK (a)	Japan	91,754.9	-0.09	71.1	43.93	1.019	NT
VEREINSBANK	West Germany	91,319.4	-2.35	152.8	2.80	1.039	2,337
STDEUTSCHE LANDESBANK GIROZENTRALE	West Germany	90,726.7	-3.84	90.4	43.90	1.020	NT
INCA NAZIONALE DEL LAVORO	Italy	87,782.4	-5.02	-46.7	NM	0.942	1,371
DAIWA SHINREN BANK (b)	Japan	85,925.8	32.16	209.7	32.40	1.067	NT
DEUTSCHE BANK NEDERLAND	Netherlands	85,176.3	0.36	313.6	5.80	1.086	2,402
AMSTERDAM-ROTTERDAM BANK	Netherlands	84,072.0	3.83	295.1	8.10	1.085	2,220
P. MORGAN	U. S.	83,923.0	11.28	1,001.8	NM	1.221	6,754
DAIWA BANK OF YOKOHAMA (a)	Japan	82,389.6	7.34	153.6	6.40	1.047	10,937
DAIWA BANK OF CANADA (c)	Canada	82,389.6	14.19	591.0	NM	1.126	4,694

(a) year ended Mar. 31, 1989 (b) Fiscal year ended Mar. 31, 1988 (c) Fiscal year ended Oct. 31, 1988 NM=not meaningful. NT=not traded. DATA: IBCA BANKING ANALYSIS LTD.

When your financial future is at stake, there's nothing more important than someone you can trust.



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THE U.S. SELLING ITS HIGH-TECH SOUL TO JAPAN?

ny startups are looking East for capital—and giving up a lot to get it

's Silicon Valley's version of *Let's Make A Deal*. In a glitzy high rise in downtown San Jose, Calif., a new Japanese consulting firm is on the rise. Its name, the Osaka-California Age Technology Center, says it all. Its backers, mostly Osaka-based companies in smokestack industries desperate to diversify into fast-growth technology, set up their Silicon Valley outpost last fall to screen U.S. companies for

potential deals. OCL's match is already in making: Two Japanese companies are vying for rights to develop a local startup's design for a computer that does financial analysis.

is just one sign of some might call it the Great Technological Sell-Off—a Japanese buying binge that could see some of the most promising new ideas being developed by U.S. startups. The surging Japanese has already helped these investors buy real estate, chemical companies, and steel mills. Now, it's time for high tech. The latest example: On June 12, Canon announced a \$100 million investment in Next Inc., Steven P.

hot computer startup. Canon gets a 7% stake in Next and exclusive rights to sell Next machines in Asia.

BELLS. No one officially tracks the volume or value of such deals, but there are a few indicators. Venture Economics Inc. in Needham, Mass., reports that in the past three years Japanese investors have pumped at least \$650 million into minority positions in 120 companies, mostly technology businesses that were first backed by U.S. venture capitalists. There are a few major deals, such as Nippon Mining's \$1.1 billion purchase last year of electronics maker Hitachi and Hitachi's recent \$309 million purchase of an 80% stake in its U.S.

mainframe distributor, National Advanced Systems. Britain and the Netherlands still own more U.S. businesses, "but Japan is by far the outstanding player in Silicon Valley," says Masazumi Ishii, a Redwood City (Calif.) consultant.

How grave a threat these tie-ups pose to the U.S. technology base sparks intense debate. With his track record and industry clout, Jobs was able to cinch the deal with Canon Senior Managing

tries the way it has taken the lead in semiconductors, consumer electronics, and machine tools. The erosion of those businesses can be traced partly to licensing agreements with Japan in the 1970s and early 1980s that lacked adequate safeguards for U.S. technology. This time, the vehicle is equity. "Japanese investment is used as a vacuum cleaner for acquiring technology and porting it home," warns John P. Stern, vice-president of Asian operations in the American Electronics Assn.'s Tokyo office. "If America intends to win the race based on innovation, it must stop selling its running shoes to the competitors."

Some of the blame may lie with U.S. investors. Public markets have soured on high tech. And, with overall profits lagging, venture capital funds are seeking faster returns than many high-tech companies can produce. By contrast, Japanese investors tend to be more patient. "Japan will keep buying U.S. technology companies because neither private nor public markets here are willing to support them," says Donald T. Valentine of Sequoia Capital, a



JOBS AND CANON'S TANAKA: NEXT HAS MADE ONE OF THE RARE SAVVY DEALS

Director Hiroshi Tanaka without giving up rights to his technology. But lesser startups have been forced to seek Japanese help in manufacturing and development as well. And in the process they wound up transferring their technology. For example, when Japanese tractor maker Kubota Ltd. paid \$69 million for 44% of Ardent Computer Inc., it secured rights to manufacture the minisupercomputer maker's designs and share its technologies.

As such deals proliferate, there's growing alarm in Silicon Valley and Washington that Japan will come to dominate computers, new materials, biotechnology, and other high-tech industries.

By becoming the investors of last resort, the Japanese are keeping some leading-edge technology startups afloat. But the long-term effects on the U.S. are disturbing. One by one, building-block processes are being lost. Already, suppliers of many technologies for making key materials, such as polycrystals used in semiconductors, have been bought up by Japanese investors. "We're losing the whole food chain of supporting technologies," laments Sheridan Tatsuno, a Japan consultant for Dataquest Inc., a market researcher.

Few startups can afford to consider the big picture, however. Take Menlo

Technologies Inc. When the Fremont (Calif.) startup approached U.S. venture capitalists for seed money two years ago, President Sandy Kakihana says, the best offer it got was \$2 million for an 80% stake. Investors had little interest in Menlo's plan for building microwave telecommunications chips using new gallium arsenide technology. But Nippon Mining, eager to get into electronics, was happy to pay \$2 million for a 30% stake. And, in exchange for marketing and manufacturing rights, Menlo got the use of the Japanese company's engineers and plants. "You don't get that kind of deal in this country these days," Kakihana says.

That's an understatement. Canon's infusion into Next gives the Palo Alto (Calif.) startup, with expected 1989 sales of roughly \$50 million, an indicated market valuation of \$600 million. Chairman Jobs's \$12 million investment swells to \$300 million. That "goes beyond the bounds of the U.S. financial markets by a wide margin," says Eff W. Martin, vice-president at Goldman, Sachs & Co.

BOUND TO JAPAN? And that may be a trap. By accepting Japanese funding at stratospheric valuations, the startups may have forever priced themselves out of the U.S. financial markets. That's fine, as long as the young companies continue to grow.

But if they stumble, they may have to go back to Japanese investors, who then might demand control. "We've gone to bed together. Now, if we need more money and the U.S. won't invest, my greatest fear is that we'll have to sell out to Japan," says Tu Chen, chairman of Komag Inc. of Milpitas, Calif., a publicly held maker of computer disks that has received a \$32 million infusion from Asahi Glass Co.

Whether the recent investment trend ultimately dooms U.S. companies to Japanese ownership, it already is reshaping some high-tech industries. The Japanese now dominate Komag's business of producing platters coated with thin metallic film used in disk drives. Aside from Asahi's stake in Komag, Hitachi and Kubota have bought two thin-film companies, leaving three of five leading U.S. suppliers backed by Japanese. The new backers have sustained at least two players that otherwise would have gone out of business in a recent market downturn, analysts say. And that has spurred

price-cutting. "Their staying power has been a critical change," says David B. Pearce, president of market leader Domain Technology Inc. Now, Domain's market share has slipped, and Pearce is looking for Japanese backing, too.

For their part, Japanese buyers deny any sinister intentions. Many, in fact, claim dependence on U.S. partners for growth into the 21st century. Kubota, whose domestic sales of tractors and industrial equipment are stagnant, aims to get 50% of its revenues from a new com-

Washington has a hard time grappling with the dilemma. Free-traders argue that regulations of any kind on foreign investment would kill needed capital infusions and cause Japan and other countries to stanch any flow of technology to the U.S. As a result, the Reagan Administration last year helped defeat legislation that would have required foreign buyers to report equity purchases of 10% or more in domestic companies.

So far, the only issue that has raised protectionists' hackles has been the threat of losing technology crucial to national security. That's what eventually led to the in-fighting in Fujitsu Ltd.'s 1987 bid for Fairchild Semiconductor Corp. And that, in turn, sparked the Exon-Florio Amendment to last year's Omnibus Trade Act, giving the President power to block a takeover of such strategic importance (BW—June 2). The problem is that without a better tracking system, "there is no serious information on the scope and velocity of such investment," complains Chalmers Johnson, a Japan expert and professor of international relations at the University of California at San Diego. "We should license and supervise foreign investment the same way Japan does."

Despite the risks, technology leaders such as Japs know that they must team up with global powerhouses—often Japanese—or be left behind. Their only real choice, say leading experts, is to negotiate smarter deals. Many companies, therefore, are taking funds only from Japanese investors that don't compete directly with them—yet. Others have made sure that Japanese joint-venture partners will not obtain access to technology that they could use independently.

At bottom, the trend underscores how difficult it is for any startup—indeed, almost any company acting alone—to bring high technology successfully into a global market. "Whether it's good or bad, the structural change away from single firms to international teams is inevitable," says Katherine R. Harrigan, director of the Strategic Research Center at Columbia University. The real challenge for America's technology leaders is to learn how to play the game without winding up on the B Team.

By Jonathan B. Levine in San Francisco, with Neil Gross in Tokyo and John Carey in Washington

SOME JAPANESE INVESTMENTS IN U.S. HIGH TECH

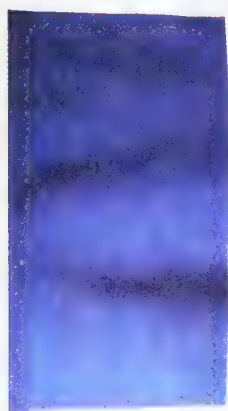
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	BURROUGHS' IMAGING SYSTEMS DIV. Facsimile machines	100.0	20.0
	VIA TECHNOLOGIES High-speed RISC computer chips	NA	NA
HITACHI	NATIONAL ADVANCED SYSTEMS Mainframe computers	80.0	309.0
	TRIMEDIA Thin-film magnetic computer disks	100.0	NA
KUBOTA	ARDENT COMPUTER Graphics minisupercomputers	44.0	69.0
	MIPS COMPUTER SYSTEMS High-speed RISC computers	21.0	27.6
	AKASHIC MEMORIES Thin-film magnetic computer disks	100.0	22.4
KYOCERA	MINORITY EQUITY INVESTMENTS IN 19 COMPANIES		22.0
TDK	SILICON SYSTEMS Chips for disk drives	100.0	200.0
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NA=NOT AVAILABLE

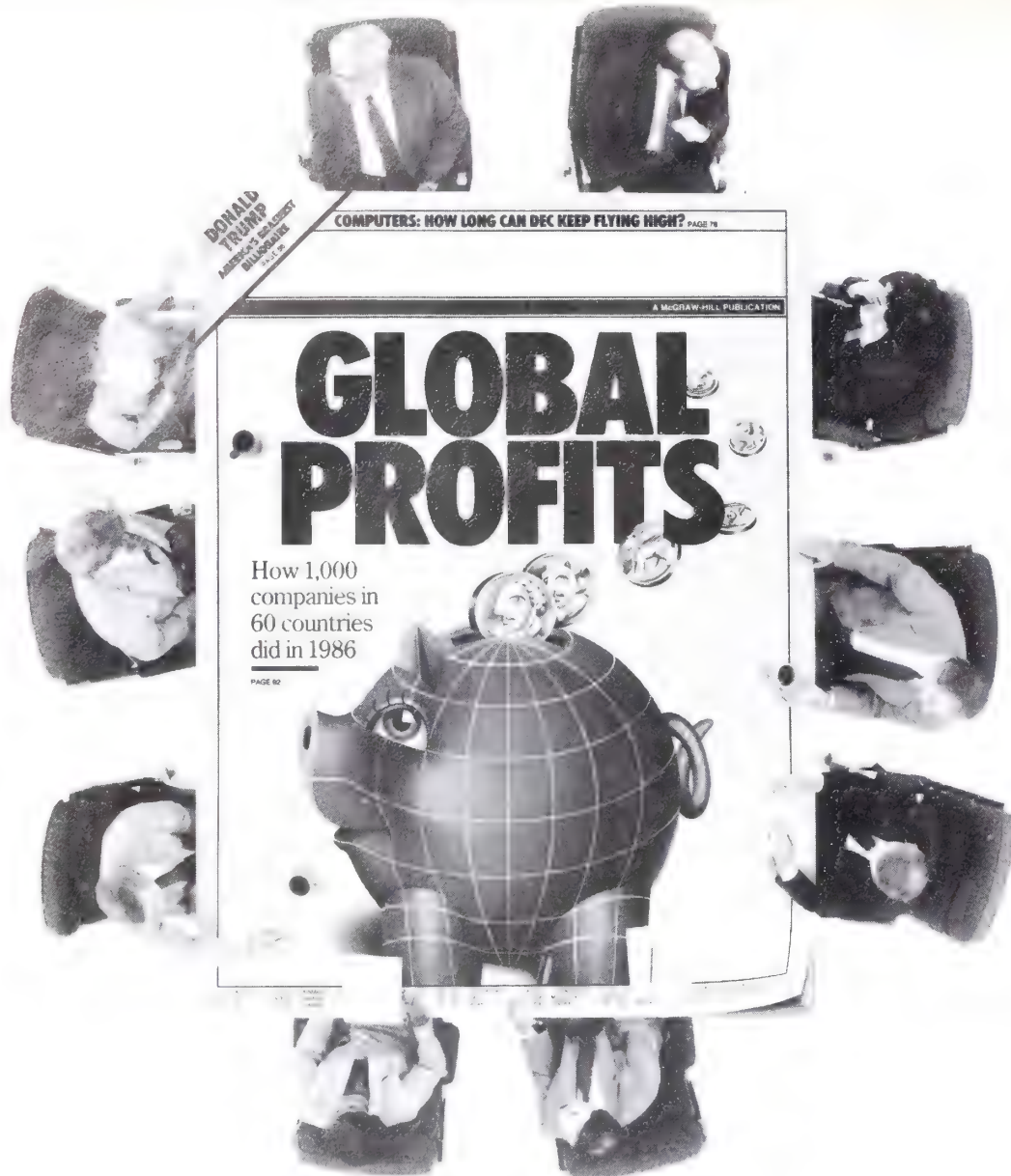
DATA: BW

puter unit by the mid-1990s. "Everything we know now about computers comes from [U.S. investments] Ardent and MIPS [Computer Systems Corp.]," says Managing Director Masahiro Yoshida. In all, Kubota has invested \$169 million in six U.S. computer makers.

NATIONAL SECURITY LEAKS. That's fine for Kubota, but American companies may ultimately pay a dear price. When Amgen Inc., the Thousand Oaks (Calif.) biotechnology leader, was strapped for capital in 1984, it let Japan's Kirin Brewery Co. buy 50% of a joint venture formed to develop key drugs for treating anemia and cancer. These drugs now drive Amgen's growth. Kirin is limited to selling them in Asia. But through the partnership, it has acquired the wherewithal to develop other products that wouldn't be limited to Asia in the future. "It's been a rewarding relationship," says Lowell E. Sears, Amgen's chief financial officer. "That said, we're very concerned about the competitive pressure from Japan—including Kirin."



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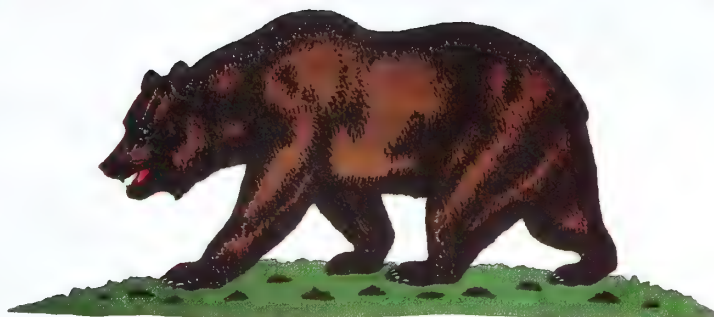
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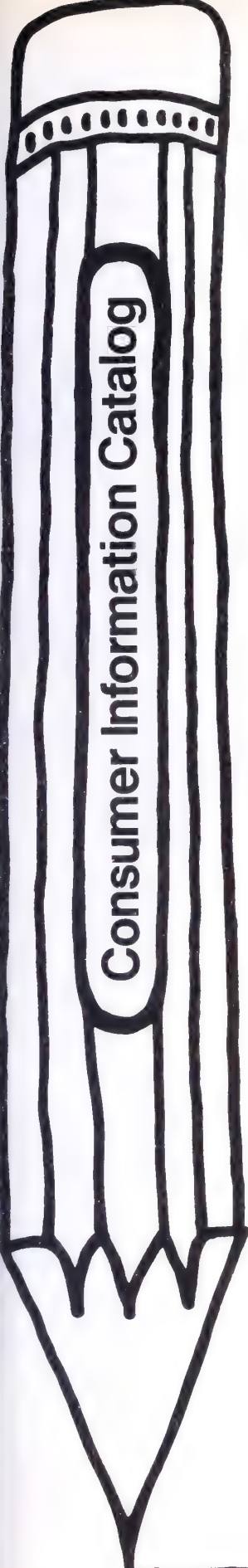
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GOLF'S OLD GREATS ARE REALLY SWINGING AGAIN

Corporate America has discovered the Senior Tour—where a little ad money goes far

If they had played any sport other than golf, Arnold Palmer, Gary Player, Chi Chi Rodriguez, and Billy Casper would long ago have been relegated to the memories of their fans and a spot in some Hall of Fame. But thanks to the Senior PGA Tour, these and other greats over 50 are still vying for a spot on the leader board. And their fans can't seem to get enough of them. The seniors will take part in 41 tournaments this year, not far behind the regular PGA Tour's 50, and up from only two in 1980. That year, total prize money for the seniors was \$250,000. This year, it's budgeted at \$18.6 million—still far behind the regular tour's \$45.2 million, but, all in all, not a shabby growth rate.

'NO BETTER VALUE.' Much of this success is due to the enthusiastic support of Corporate America. Almost four-fifths of the events on the Senior Tour are now backed by a corporate sponsor, compared with only one third in 1983. And the list is increasingly blue-chip. It includes Digital Equipment, Chrysler, PaineWebber, GTE, and RJR Nabisco, to name just a few. The reasons aren't hard to find. For one thing, the Senior Tour generally costs less to back.

The key to the success of the Senior Tour, however, is its efficiency in reaching a small target audience of high-income, decision-making corporate executives. "There is no better value in sports than senior golf," says R. Michael Franz, chief executive officer of Murata Business Systems, which recently became title sponsor of the Dallas-based Murata Senior Reunion. "It's a great way to reach customers." Similarly, GTE, which sponsored one senior tournament three years ago, is backing five in 1989. And Transamerica Corp., which for years sponsored a major tennis tournament on that sport's Grand Prix circuit, abandoned tennis last year in favor of a senior golf tournament.

The appeal of seniors golf is personal, too. Many top executives are about the same age as the golfers. And being a corporate sponsor entitles a company to set up a hospitality tent for guests or reserve a spot for customers in the program when pros play with ordinary duffers. The opportunity for anecdotes to take back to the office is far higher than

on the regular tour, where executives can wind up playing with a young pro who hits his drives out of sight but is relatively unknown (page 123).

The success of the Senior Tour has come swiftly. As recently as 1978, there was only one tournament for pros over 50: the PGA Seniors' Championship, started in 1937 with the support of the legendary Bobby Jones. Then, in 1978, a tournament called Legends of Golf was launched as a TV show featuring former greats. It was so successful that in 1980, the PGA Tour sponsored two tournaments.

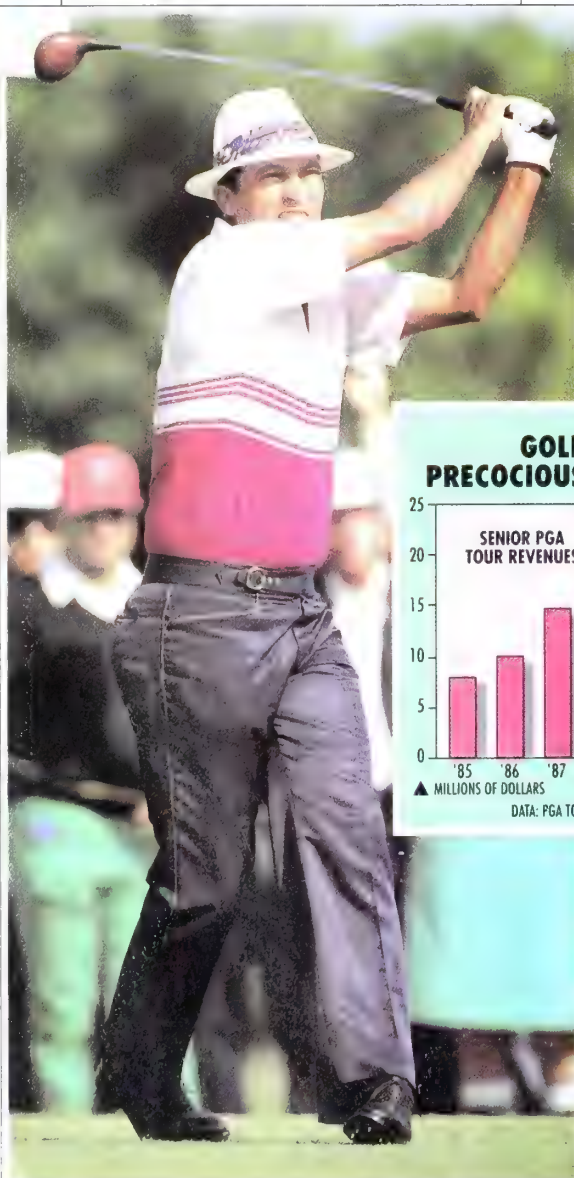
"I thought it had the potential to someday expand to maybe eight events," says PGA Tour Commissioner Deane R. Beman.

Beman and others underestimated the tour's potential in part because many people equated the Senior Tour with the annual nostalgia trips offered by other

sports, notably baseball and basketball. But golfing greats, unlike their colleagues in other sports, still play a creditable game. No one claims they're as good as the players on the regular tour. "The younger players' eyesight is better, and their bodies don't hurt," says Jim Ferree, 58, a

mainstay of the Senior Tour. He estimates that head-to-head, the Senior Tour's stars would score about 12 to 16 shots behind the regular tour's. But competing among themselves, the seniors still put on an exciting show.

Until the creation of the Senior Tour, if a sponsor wanted to get into golf but found the regular tour to be too expensive, the alternative was usually the Ladies Professional Golf Assn. But for the past few years, the LPGA's growth



CHI CHI RODRIGUEZ: AN OLD PRO KEEPS TEEING OFF

GOLF'S PRECOCIOUS SENIORS



has flattened out. "They would have been more successful if the Senior Tour had not come along," says Beman. The PGA's problems may have been caused more by faulty management, however. "We never had a well-organized marketing plan before," says William A. Blue, the PGA commissioner until last November to turn it around. Optimistic despite the Senior Tour, Beman is appealing to different markets. "Beman, once a doubter, now thinks the Senior Tour has just begun to tap its potential. It already earns \$1.3 million in TV rights and is in the final stages of negotiations with ESPN on a new contract that will increase the number of tournaments shown on the cable network to 16 by 1992, up from 13 this year. Beman is demanding that many of these tournaments be shown via tape-delay after the week's regular tour so that the pros do not compete for viewers."

SING THE PURSE. The additional TV revenues will make the Senior Tour even more attractive for the players, most of whom earned far less on the regular tour during their prime than they do now. Palmer, for example, played in 18 tournaments last year and won only one, earning \$185,373—good enough for 17th place. But that was still more than he made in any other year in his extraordinary career, except 1971, when he made \$210,000. Bob Charles, the leading money-winner among the seniors, brought home \$533,929, far less than the winnings of \$1,147,644 raked in by Jack Nicklaus on the regular tour last year.

Beman wants sponsors to raise the tournament purses from an average of \$100,000 to \$500,000. That will mean working with sponsors to improve the financial performance of individual tournaments. In 1988, only 30% were in the black. This year, with increasing corporate support, closer to half will make money. A key reason for the poor performance is that while the Senior Tour appeals to affluent executives, it has never been known for large galleries of age fans. This failing is hardly surprising since many events on the tour are so new, they haven't yet had time to become well known within the communities where they are held.

Look for the galleries to swell soon, though. Next year, Jack Nicklaus and Greg Trevino, two of the most popular stars ever, will turn 50 and move to the seniors circuit. For fans who got hooked by the golf bug when Palmer, Nicklaus, and Trevino came battling it out in the back nine Sunday after Sunday in the 1960s, the Senior Tour may be just like old times. But it's likely to be close enough.

By William C. Symonds in Ponte Vedra, Fla.

'SO I'M AT THE TEE WITH ARNIE PALMER, AND HE SAYS TO ME . . .'

It was a scene designed to quicken the pulse of even an armchair duffer. As the 200 executives, doctors, and other professionals sipped drinks, they could watch films of the immortal Bobby Jones flicker on the wall or shake hands with a real, live immortal, such as Billy Casper. Finally, there was a call for silence from Deane R. Beman, commissioner of the PGA Tour, and Motoyuki Katsube, executive vice-president of Mazda Motors of America, title sponsor of the Mazda Senior Tournament Players Championship in Ponte Vedra, Fla., one of the most important events on the Senior Tour. It was time.

As everyone watched, Beman and Katsube began a lottery to determine which amateur foursomes would play with which of the 54 pros in the next day's pro-am event before the main tournament. After several drawings, the crowd fell silent as the name of "The King," Arnold Palmer, was drawn. The quiet was broken by a cheer from Hamilton Bisbee, president of Coastal Plastics Inc. and one of the chosen. "I've always dreamed of this," he beamed.

Welcome to what Casper calls "the lifeblood of the senior tour." To be sure, the regular PGA Tour has long featured one-day pro-am games ahead of its tournaments. But at most senior tour events, the pro-am runs for two days because the senior tour needs the money provided by the pro-am.

INTO THE WOODS. At both regular and senior tour pro-ams, the cost of playing a round with a pro can vary from \$500 to \$5,000. It was \$3,750 at the Mazda Seniors, which offered only one day of golf for the amateur participants. The \$500,000 or so raised was unusually high. More typically, about \$250,000 is raised from a Senior Tour pro-am event, and this money goes to offset the costs of running the match.

For many corporations, "golf is the most important vehicle for customer entertainment," explains R. Todd Lincoln, manager of special events and sports marketing for Merrill Lynch & Co. "And nothing is more effective than a pro-am spot in attracting CEOs and other top executives to an outing," he adds.

The method of play at the Mazda pro-am was typical. There were four amateurs with each professional, playing as a team, and the idea was to keep moving. Whenever an amateur shanked a ball into the woods or the

adjoining green, he was encouraged to drop out until the next hole. Time could not be wasted while he searched for his ball. Amateurs are forbidden to receive cash prizes, so the winners got merchandise.

Because the senior pros are generally the same age as the amateurs, they tend to be much better at relating to the corporate executives in their groups, "and they're not as intense as players on the regular tour," says Beman. As Chi Chi Rodriguez arrived for his tee time at the Mazda, for example, he immediately began looking for ways to help the amateurs relax. "It's natural for these guys to be nervous," Rodriguez reasons, since they know their



BISBEE, PALMER: THE AMS MEET THE PROS

game will look poor in comparison with the pros. Told that one of the amateurs in his foursome was a city councilman, Rodriguez inquired in a loud voice: "Are they investigating him?" and drew a huge laugh from the amateurs and the gallery. When the councilman later proceeded to hit a poor tee shot, Rodriguez turned to the gallery and remarked: "Those are your tax dollars at work."

Palmer, meanwhile, helped his foursome select clubs and line up putts, all the while asking about their businesses. "We had a great time," says Bisbee. "It was the biggest thrill of my life in golf." The more duffers who agree with Bisbee, the more successful the seniors golf tour is likely to be.

By William C. Symonds in Ponte Vedra, Fla.

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HOW 'SAM THE HAMMER' COULD NAIL THE AIRLINES

Transportation's Sam Skinner pushes for more competition

When President Bush reached beyond his cadre of Washington veterans to tap Chicago attorney Samuel K. Skinner as Transportation Secretary, the Establishment curled its collective lip. A politician with little experience outside his home state, the slightly rumped Skinner stood out from the Bush Cabinet like a cheap polyester suit in a rack of expensive pin-stripes. Washington insiders saw the appointment as a payoff to Illinois Governor James R. Thompson, Skinner's political mentor and architect of Bush's victory in the Illinois primary.

But less than five months into the job, Skinner has surprised the cognoscenti by handling some of the thorniest issues around with all the savvy of a Washington pro. When Congress expressed outrage over the terrorist bombing of Pan Am Flight 103, Skinner promptly imposed new security measures at airports. When contract talks collapsed at Eastern Air Lines Inc., Skinner opposed federal intervention and threatened legislation to block secondary boycotts by unions. As a result, Skinner has won star status in the Bush Cabinet, and he is enjoying a honeymoon with airline management. "We've been very impressed with Sam," says Delta Air Lines Inc. President Hollis L. Harris.

"He has a very practical approach."

But that approach still faces some huge tests. With dismay over the state of the deregulated airline industry growing in Congress, Skinner must come up with big reforms to forestall drastic intervention by legislators. Says Skinner: "It was not the intent of deregulation to give anybody a monopoly."

RELENTLESS ZEAL. That sentiment represents a departure from the philosophies of Elizabeth H. Dole and James H. Burnley, Skinner's predecessors at Transportation. Dole and Burnley were ardent deregulators. But for Skinner, pragmatism—and a shrewd sense of self-promotion—have always come first. A Chicago native, the 51-year-old Skinner attended DePaul University's law school at night while he worked selling IBM computers. Later he was a federal prosecutor and U.S. attorney. Nicknamed "Sam the Hammer" by the Chicago press for the relentless zeal of his prosecutions, Skinner came under fire for being a publicity hound—though most of the political corruption cases

that he took to trial ended in conviction.

By 1984, when he was named chairman of the Regional Transportation Authority, operator of Chicago's commuter rail system, Skinner was a well-known figure in the Illinois Republican Party. He had backed George Bush in his primary struggle with Ronald Reagan. Later, in 1988, when Bush campaigned in Illinois, Skinner stuck so close to Bush that campaign workers jokingly took to calling him "Velcro." Yet his reputation as a Republican stalwart never affected his friendships with prominent Democrats. He is a regular partner of Representative Dan Rostenkowski (D-Ill.).

Like Rostenkowski, Skinner is a practical Chicago pol. Take the Exxon oil spill in Alaska: An instinctive conservative, Skinner at first left Exxon Corp. alone to grapple with the cleanup. But when the company failed to move as fast as the Administration wanted, Skinner turned on a dime and publicly blasted Exxon. The company redoubled its efforts, and Skinner scored big points in the media.

Skinner will need similar flexibility as he tackles the task of making the airline industry, now dominated by seven carriers, more competitive. He has already balked at USAIR's plan to buy eight gates from Eastern in Philadelphia, while USAIR now controls 15 gates. On June 1, the Justice Dept. sided with Skinner, for now the deal has stalled. Skinner also has asked Justice to challenge a proposal by American Airlines Inc.



SKINNER'S AGENDA

REGULATION

Congress and the airlines want to end political interference in the Federal Aviation Administration, making it a separate agency. Skinner opposes such a spinoff.

AIRLINE COMPETITION

Lawmakers and consumer activists worry that major carriers may dominate hubs and force up airfares. Skinner wants to enhance competition while encouraging airlines to modernize their fleets.

AIRPORT CAPACITY

Environmentalists and others fight enlargement of existing airports and construction of new ones. Skinner must overcome opposition, work out construction financing, and oversee improvement of air traffic control.

ta to merge their computerized reservation systems.

he real test for Skinner will be reducing the tremendous marketing clout of big carriers. A recent General Accounting Office study found that at airports where there is little competition, fares are 27% higher on average than at airports where more carriers compete. Congress now feels some sort of reregulation is needed to prevent price-gouging. "We will give Skinner a chance to act, and we will take the matter into our own hands," warns Senator John Danforth (R-Mo.), ranking minority member of the Senate Commerce Committee.

IDEAS. Danforth's staff is preparing its own list of measures to promote inter-airline competition, and the senator wants to see action from Skinner by the fall. Already, Skinner has a number of far-reaching proposals in mind. One idea is to force the big airlines to turn off their computerized reservation systems, whose services are sold to travel agents. Although the reservation systems list the scheduled flights of all airlines, smaller rivals feel that the airlines' owners develop such close relationships with agents that they can use commission incentives and other tactics to get favorable treatment.

Skinner also wants to address the issue of airport gates. By holding on to long-term leases for gates at an airport, one or two airlines can block the entry of a third carrier to introduce competition. A possible solution: Mandate the use of long-term leases.

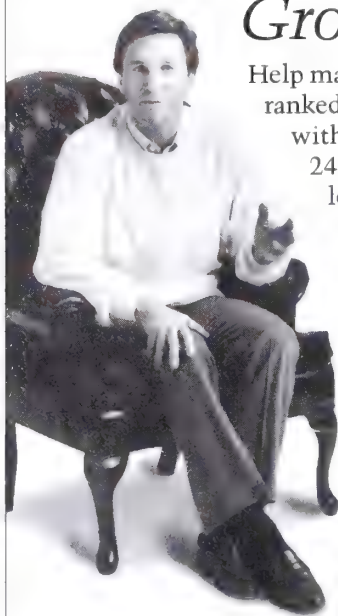
Another related change would be to reallocate landing and takeoff rights, which the Transportation Dept. has parceled out to carriers flying to Washington's Ronald Reagan, Chicago's O'Hare, and New York's LaGuardia and Kennedy airports. A successful effort by the government to redistribute some of these slots to other airlines could increase competitive pricing.

Another move could be the abolition of frequent-flyer programs, which build customer loyalty but distort consumers' perceptions of airlines. Skinner believes it would be better for carriers to compete directly on price and service.

Whether practical or not, Skinner's proposals are guaranteed to provoke an attack from the very airlines that now sing his praises. But by publicizing his wish list, Skinner is giving the industry a chance to comply voluntarily before either he or Congress has to take action. Whatever the outcome, compromise will not be reached easily, and both airline executives and consumers will soon learn firsthand about Skinner's hard-charging Chicago style. The Hammer, it seems, is about to make a reappearance.

by Seth Payne in Washington, with bureau reports

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MICHAEL BOSKIN ISN'T JUST ANOTHER IGNORED ECONOMIST

When the current CEA chairman talks, the President lends an ear

Chairman of the President's Council of Economic Advisers. The title sounds grand. But as many high-powered economists who served in the post have learned to their regret, "advisor" is Washington-speak for "no real power."

Herbert Stein couldn't stop Richard M. Nixon from imposing wage and price controls. Charles L. Schultze watched from the sidelines as Jimmy Carter stumbled his way into double-digit inflation and 20% interest rates. Martin S. Feldstein's warnings against the dangers of massive budget and trade deficits were ignored by the Reagan White House. And Feldstein's successor, Beryl W. Sprinkel, was reduced to being little more than a Ronald Reagan cheerleader.

George Bush's chief economist, Michael J. Boskin, is doing his best to breathe some life into the CEA. The 43-year-old Californian's secret? Unlike many academics who disdain politics, Boskin seems to enjoy it. And unlike most of his predecessors, the Stanford University economist is no stranger to the man he serves. "The President likes him," says White House aide James Cicconi. "There is a rapport."

Access to the President makes Boskin a player in the inner circles of the Administration. Says Lawrence A. Kudlow, a former top Reagan Administration economist: "A CEA chairman is only as good as his relationship with the President. Period." Boskin and Bush talk as often as twice a day—on the phone, in formal meetings, and on the White House tennis court.

The two men first met a decade ago when they began to build a relationship. It was when candidate Bush began to ignore Boskin's economic advice. Boskin had prepared Reagan in 1980 for a debate with Carter and served as H. Baker Jr.'s economic adviser

when he was Senate Majority Leader.

Boskin has made the most of his access, putting his stamp on key trade and environmental policy decisions. He took an unusually active role in the debate that led to Bush's June 12 proposals to revise the Clean Air Act. And Boskin was able to steer the decision toward

Carla A. Hills in an effort to keep Japan off the list. He was fated to lose: Following Boskin's advice would have caused a firestorm on Capitol Hill. But the chairman persuaded Bush to soften the blow by naming other countries as well and by limiting the complaints against Japan to relatively few. "Boskin came out of it well," says William H.

kanen, a former CEA member in the Reagan Administration. "The cards were stacked against him."

Boskin's views aren't ideological. He mixes a belief in tax incentives with a recognition of the impact of both fiscal and monetary policy. And the CEA chairman even admits: "I don't like Keynesianism as a dirty word." It's an opinion that would have been heretical during the Reagan years. "He's solution-oriented," says American Enterprise Institute economist John Makin.

UPHILL FIGHT. Like his boss, Boskin wants to cut tax rates on capital gains. Some in the Administration—notably White House aide Lawrence B. Lindsey, a former Harvard economics professor—promote the capital-gains cut as a revenue-raiser. But Boskin favors it as sound tax policy. "Whether it gains or loses a billion in revenue, it will be good for the economy," he says.

Boskin's fellow council members are equally pragmatic. John Taylor, a Stanford colleague with close ties to Federal Reserve Chairman Alan Greenspan, is a strong analyst with middle-of-the-road views. The council's chief economist will be Richard Schmalensee, a specialist in industrial organization from the Massachusetts Institute of Technology. The three are "solid, professional economists," says Harvard economist Lawrence Summers.

Boskin will have to fight to maintain his credibility in an Administration that has little use for economists. Budget director Richard G. Darman is publicly dismissive of the profession and has yet



BOSKIN'S PRIORITIES

- ▶ Defend free trade
- ▶ Reduce the federal budget deficit
- ▶ Provide incentives for private saving
- ▶ Invest in human capital
- ▶ Support corporate research and development without picking winners and losers
- ▶ Improve quality of government statistics

more market-oriented solutions that will, in many cases, allow industry to come up with its own ways to meet standards.

He also scored points in the White House arguments over whether to name Japan as a potential target of U.S. trade sanctions. A free-trader, Boskin took on Commerce Secretary Robert A. Mosbacher and U.S. Trade Representative

ne his own chief economist. The top
nomist's job at the Treasury Dept.
remains unfilled.

et Boskin is thriving. Before busi-
s groups, congressional committees,
journalists, he functions as the Ad-
istration spokesman on a wide range
economic issues, sticking to the party
and almost never airing internal dis-
ses in public.

oskin has been careful to avoid up-
ping Treasury Secretary Nicholas F.
dy, a close friend of Bush and the
nistration's nominal economic
esman. Similarly, Boskin defers to
man on matters of budget policy.
knows how to pick his fights," says
Administration aide.

ANCED. The CEA chief's personal
e fits in well with Bush's. Says one
nistration insider: "Boskin's views
balanced. His style is not adversarial
ogmatic." And unlike some predeces-
, Boskin does not assert that sound
omics should always shape policy.
economic analysis the only input?"
Boskin. "Of course not. There are
r considerations involved."

ich as politics. Boskin has avoided
ming ensnarled in the almost theo-

lthough the White House
d some Fed-bashing early
, Boskin now has nothing
but praise for the board

al debate about the economic impact
dget deficits. He believes that defi-
are bad but isn't obsessed with the
tion.

oskin has written extensively on the
to increase personal savings, his
emic specialty, but is cautious about
tax incentives as long as the budget
it remains high. "We have to be
we don't increase the deficit," he
"That will only transfer the prob-
—boosting private saving by rais-
government borrowing.

oskin has also been building bridges
e Federal Reserve. Although the
nistration indulged in a bit of Fed-
ing early on, Boskin now has noth-
out praise for the central bank. He
almost daily to both Greenspan
Vice-Chairman Manuel H. Johnson.
far, Boskin has made all the right
s. He has raised the profile of the
and scored some modest successes
haping policy. His political skills,
ever, won't really be tested until the
omic going gets rougher. And then
question will be whether Mike Bos-
an keep the President's ear.

By Howard Gleckman in Washington

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ALLEGHENY'S BATTLE TO COME BACK FROM THE ABYSS

After 16 months of Chapter 11, stockholders still can't agree on a reorganization plan



SUNBEAM PLANT: ITS FUTURE IS CLOUDY

On Feb. 20, 1988, Allegheny International Inc.'s Oliver S. Travers Jr. was in high spirits for a chief executive who had just filed for reorganization under Chapter 11. A few days later, he even clowned for a photographer by pretending he was about to jump from his 18th-floor window at AI's Pittsburgh headquarters. Chapter 11, Travers reasoned, would allow management finally to bring its \$1 billion housewares business back into the black.

These days, hijinks are the last thing coming from Travers. "[It's] not a friendly environment," he laments. "There are a lot of distractions for management. And employees don't like living in suspense." Although AI planned to emerge from bankruptcy in less than a year, board and courtroom squabbles have kept it from delivering a viable reorganization plan to the court. Five proposals have already fallen through—partly because management's eight directors have been at odds with the other five members representing stockholders.

Meanwhile, AI keeps losing money—as it has for the past four years. For the six months ended on Apr. 2, AI's operating earnings were down 25% from a year earlier. That prompted Donaldson, Phipps & Jenrette Securities Corp. (DLJ)

to ask in May for a \$70 million cut in its \$750 million offer to buy AI. DLJ was rebuffed, and it walked. The board's current plan: to reorganize AI's operating divisions and run them with a new board and CEO. Creditors expect the surviving company to be renamed Sunbeam Corp. Travers would step down.

Time is running out. While the AI units that make patio furniture and grills is thriving, the division that produces small electrical appliances, which account for 46% of sales (table), keeps slipping. Sunbeam and Oster appliances—including food processors, mixers, and blenders—carry strong brand

names, but the division is plagued by weak product development, revolving-door management, and poor morale.

Several creditors believe that some asset sales are inevitable, and a few properties are appealing. AI's units, which make barbecue grills and patio furniture, have grown nearly 265%, to \$8 million—a third of total sales—since 1984. The company's three smallest businesses—electric blankets, clocks, and bathroom scales—have solid market shares and profit margins.

If AI were to sell its recently consolidated Sunbeam Appliance Co. (SAC) and Oster units, it would have to take a depressed price. One AI banker estimates that SAC/Oster would probably fetch about \$200 million. That's some \$60 million less than Black & Decker Corp. said it was willing to pay six months ago, before a close look at the company's financials prompted it to back out.

TECHNICAL GLITCHES. Sunbeam has been losing ground for years. For one thing, product development funds have been limited and ill-spent. For three years, Sunbeam hasn't had a big winner such as its well-designed minifood processor, Oskar, introduced in 1985, or its automatic shutoff iron, launched a year earlier. Last year, AI was counting on a similar smash with its Venture I over-fast-cooking countertop convection oven to be marketed as an alternative to microwaves. But the project flopped because of the oven's slow heat-up period, and AI took about a \$5 million write-off.

Worse, some retailers say they are reluctant to promote Sunbeam products that give them prominent shelf space to which they know who's going to own and operate the business. While retailers have abandoned Sunbeam—and many retailers' strong supporters—some have scaled back purchases. K mart Corp., for instance, has cut its purchases of Sunbeam appliances by about 15% in the past two years. AI says that's partly because it has trimmed its product line.

Competitors in the \$7.5 billion domestic housewares market smell blood. When manufacturers see a competitor "having a difficult time breathing, they step on the windpipe," says a major

ALLEGHENY INTERNATIONAL'S CHANGING FACE

Division	1984 sales	1988 sales
	Millions of dollars	
SMALL APPLIANCES	\$455	\$442
Mixers, blenders, electric blankets		
OUTDOOR PRODUCTS	118	313
Patio furniture, grills		
CLOCKS, SCALES, OTHER	937	213
TOTAL SALES	\$1,510*	\$968

*Includes discontinued operations

DATA: COMPANY REPORTS

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tailer's small-appliance buyer. Black Decker, which has the biggest line of small home appliances, has won more than 50% of the \$375 million U.S. iron market—much of it from Sunbeam.

But Sunbeam has always been a "sleeping giant," says a competitor. When AI swept in as a white knight in 1981 to save Chicago-based Sunbeam from IC Industries Inc., it paid a hefty \$534 million without doing much search. Sunbeam was losing \$30 million a year at the time and has been profitable only once since the acquisition. At the time of the Chapter 11 filing, however, Travers had made some headway. Seven of nine Sunbeam plants had closed, and Sunbeam and Oster merged. **NEW FOCUS.** To finish Sunbeam's makeover, the board tapped James D. Milligan, a private investor, to head Sunbeam Corp. if their new plan is approved by the court. The position had been filled four times in seven years. But Milligan appears to be uniquely qualified to take over a sick company.

In 1981, while serving as president of the food division of Borden Foods, Milligan was asked by DLJ principal Dan Lufkin to repair the struggling \$500 million Toledo miniconglomerate Questor Corp. A CPA by training, Milligan slimmed down Questor and in two years moved from a loss of \$13 million in the black.

As DLJ's choice to head AI before the deal fell through, Milligan had already drafted a strategy. While he won't comment now, he said in an interview that he plans to focus the company on products better. Rather than selling items at all price levels, he'll market Sunbeam in the quality, moderate-price niche. He plans to exploit the brand name and broaden the product line by slapping the nameplate onto AI's Alamo Lawnlite's lawn furniture and other products. He also believes he can save \$100 million in costs by reducing unnecessary capacity and winnowing out slow-selling products. "Sunbeam is troubled," he admitted, "but don't forget that AI's other businesses have acceptable returns."

Milligan has plenty of work ahead. But will he get the chance to stage a turnaround? It's hard to say. On June 1, U.S. Bankruptcy Judge Joseph L. Sett, normally mild-mannered but recently fed up, invited competing reorganization proposals from creditors' groups—and even hinted at a possible liquidation. Unsecured creditors have put their two cents in, and bankers are supposed to announce a plan soon. Ollie Travers faces his waning days at the helm of AI, the nightmare just keeping getting worse.

By Michael Schroeder in Pittsburgh

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WASHING THE GRAY OUT AT ALBERTO-CULVER

Chairman Lavin finds new blood—right in the family

Nobody has ever accused Leonard H. Lavin of ignoring details. The chairman of Alberto-Culver Co. has been known to station himself at Alberto's front door in Melrose Park, Ill., checking who arrives on time in the morning. He cruises the halls riding herd on product managers. He has even walked the shop floor griping about bottle caps that have fallen off the production line. "If you're easily intimidated, he's not the best person to work for," says one of his former marketers.

But Lavin is starting to loosen his grip. Last fall, he promoted his son-in-law and daughter, Howard and Carol Bernick, to powerful positions within the \$605 million hair-care and household products company. As chief operating officer, Howard Bernick is heir apparent. Carol was named head of new products. With the Bernicks minding the store, Alberto's 69-year-old founder is now more likely to be found scouting markets on the company's Falcon 50 jet than catching laggards by the door. And Alberto is undoubtedly better off for it.

Lavin actually began delegating more authority a few years back. The result: After-tax operating earnings have leapt 33% annually since 1984, to \$24.6 million in the fiscal year ended last September. Operating margins—a mere 5% in 1984—hit 9.3% in 1988 (chart). Profits should slow a bit this year. But that's largely from buying 175 Save-Way beauty stores—a move analysts applaud. Alberto's Class B shares have leapt 34% since early April, to a record price of 40 1/2.

NO HOLD. Lavin's pullback came none too soon. Known for his keen marketing instincts but demanding management style, he had lost many key executives over the years. Moreover, dwindling sales, mounting interest charges overseas, and a revised plan by Lavin to push Bernick to diversify into leather goods and ski boots cut

the company was out of control. "Alberto had gotten so big that no

matter what I said there was no way I could keep it all under my fingertips," Lavin says. So in early 1984, he put Howard Bernick at the head of a newly formed management committee charged with solving Alberto's problems. A former First Boston Corp. bond salesman, Bernick had joined Alberto in 1977 shortly after marrying Carol. The committee



THE CONTROLLING KIN: THE LAVINS AND THE BERNICKS

dumped the money-losing leather goods units and replaced top management at Alberto's international division. Bernick also instituted new management and accounting controls and expanded Sally Beauty Co., a chain of successful stores that supply stylists and retail customers.

Carol Bernick, in turn, created several products that helped bolster the household goods division. Mrs. Dash, a salt-free seasoning introduced in 1983, now represents nearly 4% of Alberto's sales. It was followed by Molly McButter, a low-cholesterol butter-flavored sprinkle.

With more free time, Lavin went looking for new products. In 1984, he

saw a hair mousse in Europe and developed one for American consumers within 90 days—just two weeks after L'Oréal launched the first such product in the U.S. Alberto Mousse is now No. 2 in category and dominates the comparatively small styling product sales.

SHELF SPACE. Wall Street credits Bernick for modernizing the company. Lavin founded in 1955. But while he's lauded for shedding the leather goods division, buying it was his idea in the first place. And his effort to create two classes of stock to raise capital and make acquisitions without diluting family control confused investors. The family, including Lavin's wife and corporate secretary, Bernice, controls 47% of the value thanks to its wad of more powerful Class B stock. But the Class A shares trade at a much lower price, making them of little use in acquisitions.

For now, Alberto's growth—led by the Sally Beauty chain—silences most critics. Sally Beauty recently accounts for 10% of Alberto's sales, up from 18% in 1983. When the Save-Way acquisition squeezes Sally's margins temporarily, the stores serve similar customers and should add to Sally nicely.

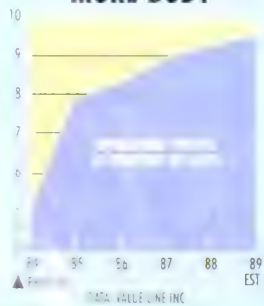
As good a growth engine as it is, however, Sally Beauty is by no means a low-margin business. Says industry consultant Allan G. Mottus: "It's coming the tail wagging the dog." To keep profits up, Alberto must maintain Sally Beauty's growth with new products in

other divisions. Bold Hold, a line of hair-care products, is helping. But some analysts argue that Alberto could use shelf space more cheaply with acquisitions. Not that it hasn't tried. In 1987, it went after Lamaur Inc., a hair-care company in Minneapolis, only to be outbid by Dow Chemical Co.

But with low debt and strong cash flow, Bernick will have more choices. And count on Lavin to keep looking for Alberto's next winning product. For his management foibles, Alberto dismisses Lavin's creative spark when he tires. But that won't be anytime soon. "They'll have to carry him out of his office," says P. Douglas McAuley, head of Alberto's consumer products division. That'll give the Bernicks some time to learn a few more of his tricks.

By Julia Flynn Siler in Melrose Park, Ill.

ALBERTO'S MARGINS: MORE BODY



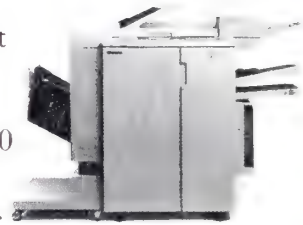
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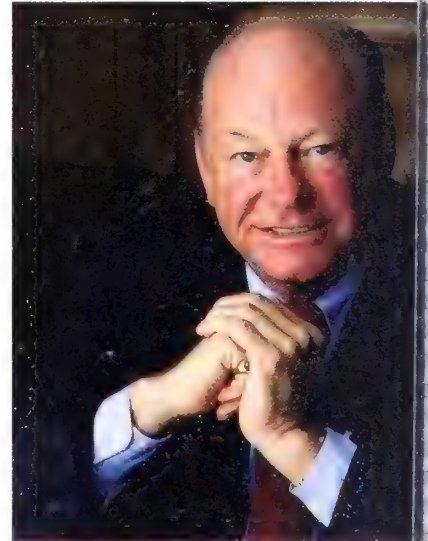
by Allen E. Paulson

**Chairman and Chief Executive Officer
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AND MAY: THEIR DREAMS OF BUILDING A CHEMICAL EMPIRE HAVE FALLEN FLAT

ELSON PELTZ: SHOPPING D CHASE THE BLUES

royal was a setback—but his Avery has money to spend

After years of controversy, Uniroyal Chemical Co. caved in. In early June, the company announced it was voluntarily halting U.S. sales of the pesticide Alar, which environmentalists have attacked as a carcinogen. For Uniroyal, the solution wasn't threatening. The company claims domestic sales of Alar, which helps keep apples crisp, account for less than 1% of revenues. But removing Alar from the market is only the most visible twist in a labyrinthine corporate tale.

Uniroyal is a subsidiary of Avery Chemical, a holding company controlled by Elson Peltz and Peter W. May. In the 1980s, the pair used Drexel Burnham Lambert Inc.'s junk-bond machine to transform their Triangle Industries into one of the nation's largest aging companies. Peltz and May eventually pocketed \$835 million in cash after selling Triangle to French aluminum giant Pechiney for \$3.5 billion. They hoped to work similar magic on Uniroyal, which was a tiny coal company when they bought it in 1982. But their plan to create a world-class chemical empire through acquisitions fell flat in competition from foreign buyers

drove prices beyond Avery's reach. After trying unsuccessfully to peddle Uniroyal, Avery's board on June 12 approved a plan to sell the subsidiary to a group led by its management. "You can't bat a thousand," says Peltz.

STEP UP. That isn't keeping him from stepping up to the plate again. The group formed to acquire Uniroyal has agreed to pay \$240 million in cash and assume \$560 million in debt. That's not bad—Avery bought Uniroyal Chemical in 1986 for \$710 million. Peltz figures his company will clear \$50 million, leaving Avery with the coal business and a pool of cash. But not for long. Avery has authorized Peltz and May to look for acquisitions. Avery officials say they are seeking U.S. smokestack companies, with price tags of about \$250 million.

Uniroyal attracted plenty of browsers, including Rhône-Poulenc and ICI, but no serious buyers

Although hardly a financial disaster, Uniroyal's sale represents a strategic setback for Peltz and May. Peltz blames the failure on poor timing. As the dollar continued to slip in 1986, well-heeled foreign buyers began to scout the U.S. chemical market for acquisitions. The competition was too much for Avery. The company bid on Chesebrough-Pond's Stauffer Chemical unit in 1987, for example, but lost out to Imperial Chemical Industries PLC. The contest wasn't close—ICI's offer of \$1.69 billion topped Avery's bid by some \$500 million, according to Anthony W. Graziano, Avery's vice-president for legal affairs. "We got blown away," he says.

BROWSERS. It was a lesson Avery's management took seriously. By early 1988, Peltz realized he would be unable to build a chemical empire and put Uniroyal up for sale. Avery officials say there were plenty of browsers, including Rhône-Poulenc and ICI. But no serious buyer emerged. Peltz maintains that Uniroyal's basic business is sound, with fiscal 1988 operating earnings up 17%, to \$85.9 million, on sales of \$734 million. He attributes the buyer malaise to Uniroyal's diverse product line of specialty, rubber, and agricultural chemicals, an unwieldy mix for many companies. At the same time, shared manufacturing operations make selling off individual products difficult.

Some competitors and industry analysts are less sanguine. Mounting environmental concerns have forced agricultural chemical makers to develop expensive new products that are less toxic and can work with lighter applications. "Their product line just wasn't very good," says George J. Krug, a chemical analyst with Oppenheimer & Co. The debate surrounding Alar hasn't helped. One U.S. competitor says the intense public scrutiny of Alar made Uniroyal less desirable.

Although the experience hasn't dulled Peltz's penchant for making acquisitions, he may find future deals harder to finance. To build Triangle, Drexel's Michael R. Milken used junk bonds to raise a blind pool of cash. That gave Peltz and May hundreds of millions of dollars to play with—before planning a specific deal. But lower returns have made investors wary, and these days it is more difficult to arrange blind financing.

Perhaps it's not surprising, then, that Avery's acquisition plans are not as ambitious this time around. And after their misstep in the chemical industry, Peltz and May are likely to consider acquisitions more carefully. But with the money they cleared on the sale of Triangle, they can afford to be patient.

By Kathleen Deveny in New York



At a cost of \$166 million, the  **SAMSUNG GROUP** has built the largest

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making it the number one producer in the world



ONLY THE BEGINNING.

HOW COMPAQ GETS THERE FIRSTEST WITH THE MOSTEST

A unique consensus-building process helps it beat out even IBM with the latest technology

It seemed like a great idea at the time. Compaq Computer Corp., the leading supplier of IBM-compatible PCs to major companies, would merge with Tandy Corp., the top U.S.-based supplier of inexpensive PC clones to small businesses and homes. The idea, say former executives from both companies, was that Compaq's high-class engineering and Tandy's low-cost production would transform the two Texas-based partners into an unbeatable PC powerhouse. But at the last minute, in early 1986, Compaq President Rod Canion stunned Tandy Chairman John V. Roach by calling off the deal. "The bride was at the altar," gripes a former Tandy executive. "But their egos got in the way."

Not egos. Neither company will comment officially. But what kept Compaq from taking the plunge, insiders say, is something called "the process." Deceptively simple but nonetheless amazingly effective, it keeps any Compaq executive—even venture capitalist Benjamin M. Rosen, the company's strong-minded chairman—from railroading an idea through the organization. Canion wanted the Tandy deal. But other executives, led by Michael S. Swavely, now president of North American operations, convinced him that despite Tandy's strengths its Radio Shack image might undo the premium-brand reputation that Compaq had

BARELY A HICCUP. That may be open to question, but one thing isn't: Compaq has done just fine without Tandy. Since the aborted merger it has become an industry power: This year its revenues should reach \$3 billion, up five-fold since 1986. While other microcomputer makers have had setbacks, including surprise dips by Apple Computer Inc. and Sun Microsystems this year, Compaq's cash machine has had

Now, after years of watching skepti-

cally for Compaq to trip or be squashed by IBM, Wall Street has suddenly turned bullish. Since early March, Compaq's stock has soared 45%, to 97. It even briefly cracked 100, putting it within striking range of Big Blue, which has traded lately at about

The key consensus-building group is the all-important product strategy team. Headed by Canion, it includes Swavely, Gary Stimac, Compaq's senior vice-president of systems engineering, and a dozen top engineers and marketers. In 8 to 12 hours a week



CANION AND SONS:
"WE WANT TEAM
PLAYERS, NOT
INDIVIDUALISTS"

110. With analysts predicting a 24% increase in 1989 earnings, to around \$7.76 per share, Compaq sells at a higher multiple than IBM. Indeed, as IBM's share of U.S. PC sales slipped from 37% in 1985 to 24% in 1988, Compaq's share doubled from 4% to 8%, according to market researcher InfoCorp. And overseas sales, which account for nearly half of Compaq's total, are streaking ahead at about 60% annually (box, page 150).

That kind of growth often overwhelms the management abilities of entrepreneurs. But Compaq's process—a sort of endlessly introspective consensus-management system—has kept the company's core management team intact and in charge. "The process is almost synonymous with the culture, with the way we do business every day," says Swavely.

meetings, these executives soak up latest market information, including technology developments, sales figures, and intelligence reports on competition.

But there's more to this than chewing things over. To ensure issues are thoroughly discussed, Canion will take one side and Swavely Stimac another. The point is to keep the discussion honest, so that the group chooses the best idea—not the one backed by the highest-ranking executive in the room. In theory, there are no winners or losers, only contributors. "We have to leave our egos at the door," says Swavely. "But we put any question on the table with fear of being wrong."

The team may wind up tossing around an idea for months. During that time, Compaq will canvass its

ers and software developers to see proposal will fly. Once a project is the go-ahead or the ax, everyone expected to fall in line. "Above all, want team players, not individual," says Canion.

IE CONFLICT. That doesn't mean yes-, however. "Rod will tell I'm about as hard-headed hey come," says Swavely. 1985, as a tide of cheap, n-built PC clones hit U.S. puter stores, Swavely ed Compaq to build a low- ed "Fox" brand in Taiwan. er months of jawboning oth- executives, Swavely gave up n dealers rejected the idea. e machines probably would e sold well, but they would e undermined the image," says now.

ot even Canion can subvert system. Shortly after Com- shipped its first "luggable" puters in 1983, he set up a sion to design battery- ered laptops. But the liquid- tal display screens on the 7 prototypes were hard to , and the computers were rpowered.

7 1987, laptops were about astest-growing niche in the ndustry, and companies as Zenith, Toshiba, and were cashing in. Compaq still on the sidelines and ing out. And still Canion n't get his way—not until r the product-strategy p rejected three major prop- es. The process made paq late to market, but it off. When the company's laptop, the 286/SLT, was duced last October, its d and crisp screen made it vernight sensation. By this s first quarter, according market researcher Store- d Inc., Compaq had 34% of p sales through dealers, d only to Toshiba.

IESCIENCE. The process also given Compaq the confi- e to pursue a far more ag- sive role. By keeping close on the market, Compaq its chance to become a r rather than always wait

3M. In September, 1986, it took the g step of leapfrogging IBM by in- icing a PC using Intel's 80386 mi- ocessor, a chip as powerful as a computer. IBM had decided to wait 1987, when it planned to intro- a new line of PCs, the Personal m/2, and a new operating sys- the basic software that controls a

computer. But Compaq knew that thousands of customers needed the power right away.

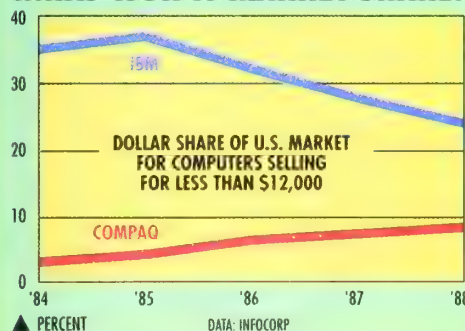
It took the lead in what has become a \$5.5 billion market, and now has about 20% of sales of 80386-based PCs, about the same as IBM, according to

COMPAQ'S SUCCESS STAYING AHEAD OF IBM...

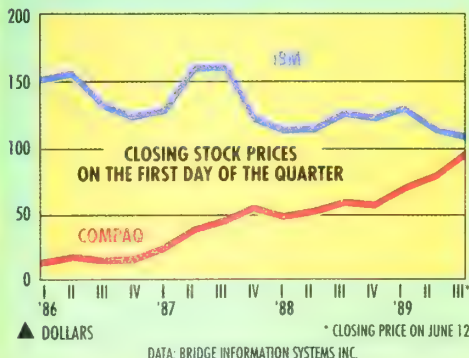
Product	Compaq introduction	IBM introduction
PERSONAL COMPUTER INCORPORATING INTEL'S 80386 MICROCHIP	Sept., 1986	June, 1987
PORTABLE 80386-BASED PC	Sept., 1987	May, 1989
PC WITH 20-MEGAHERTZ 80386 CHIP	Sept., 1987	Sept., 1987
PC WITH 25-MEGAHERTZ 80386 CHIP	June, 1988	Sept., 1988
PC WITH LOWER-PRICED 80386SX CHIP	June, 1988	May, 1989
LAPTOP WITH 80286 INTEL CHIP	Oct., 1988	None yet
PC WITH 33-MEGAHERTZ 80386 CHIP	May, 1989	Expected soon

DATA: IBM, COMPAQ COMPUTER CORP., BW

...HAS WON IT MARKET SHARE...



...AND WOWED INVESTORS



Dataquest. "By understanding the market, they saw the potential for the 80386 way ahead of everybody," says Frank Gill, senior vice-president and director of sales at Intel. The 80386 machines have boosted Compaq's over- all market share and have let it claim the title of industry leader—the com- pany that incorporates the newest

chips and other technical innovations first. Industry sources now say that Compaq has launched a crash program to beat IBM to market with a machine using the even speedier Intel 80486 chip. "The 386 showed us how impor- tant it is to get out in front," says Swavely.

IBM has stayed ahead in one area. When it brought out its PS/2 line, Big Blue also introduced a new hardware architecture. Called microchannel, it is a method for attaching circuit cards to control options such as graphics screens. IBM says microchannel im- proves the performance of PCs by let- ting them do several jobs at once. Al- though Compaq's engineers plunged into a year-long effort to clone the IBM design, Canion denounced microchan- nel as an unnecessary and proprietary alteration that would lock customers into IBM hardware.

To save customers from this fate, last September Compaq took its bold- est step yet. It led a group of nine PC makers in proposing an alternative "standard" to microchannel. This could be a brilliant move—or Compaq's first big gaffe. The microchannel already accounts for 17% of all IBM-compatible PCs sold, but the so-called gang of nine won't produce a product before the fourth quarter. And setting a stan- dard, rather than improving on one, could require an expensive marketing effort that could hurt margins, notes First Boston Corp. analyst Charles Wolf. If the effort fails, Compaq could wind up making microchannel clones and reverting to its pre-1986 role as an adroit exploiter of IBM standards.

'POSSESSED.' Meantime, both IBM and Apple are starting to pressure Com- paq. Those companies, with gross PC margins of 50% or more vs. Compaq's 41%, have been priming dealers—Com- paq's sole channel of distribution—with discounts and rebates. In April, Compaq wound up pulling its merchan- dise from Businessland Corp., a dealer that accounted for 7% of its 1988 sales, after Businessland demanded that Compaq match IBM's terms. Canion says that other dealers have already taken up the slack.

For now, analysts say, hot new prod- ucts should keep the company on a steep trajectory. One big boost, says Kimball Brown of Prudential-Bache Securities Inc., has been IBM's May product introductions, which he calls a "nonevent." Without stronger IBM am- munition, he figures that Compaq will have relatively clear sailing well into 1990.

That leaves Canion with the ever more difficult challenge of keeping his process going while Compaq mush- rooms. As the company's 5,900 Hous-

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ton-based employees spread into more buildings on its 1,000-acre campus, as the 1,600-employee overseas payroll swells, and as the growing complexity of PCs complicates product strategy, Compaq executives are facing superhuman demands on their time. "You eat, drink, and sleep for the gipper," says one former executive. "You get possessed."

Canion is well aware of the stress. "People work hard because they like to," he says. "We spend a lot of time trying to get people to 'balance' their lives, to think about their families." Canion is a case in point. The former Texas Instruments engineer's first marriage crumbled in 1987. Remarried to a Houston real estate broker, he is far more relaxed—and bent on enjoy-

ing his \$1.8 million in annual compensation and \$32 million paper fortune in Compaq stock and options. He makes time for the two sons and three daughters from his two families and has soloed in his Beechcraft Bonanza. At least that's one place where he gets to call all the shots.

By Mark Ivey in Houston, with C. Lewis in New York

THE POWER BEHIND COMPAQ'S EUROPEAN POWERHOUSE

For weeks, Wall Street analysts have trekked to Elektrastrasse 6, a drab office in a Munich industrial park. They've come to see Eckhard Pfeiffer, the trim, tanned German who managed a 105% jump in Compaq Computer Corp.'s overseas sales last year, to \$809 million. The analysts want to know if Pfeiffer, 47, can keep boosting foreign revenues, which have become Compaq's engine of growth.

So far, the answer is yes. In the first quarter, foreign sales, mostly in Europe, hit \$313 million, up 57% from a year earlier. That represented 46% of Compaq's overall revenues. The company also grabbed more than 10% of Europe's business PC market, propelling it past Italy's Olivetti and Apple Computer, to No. 2, says researcher Dataquest Inc. Compaq still trails IBM's 24.4% share, but Pfeiffer figures that foreign sales may rise 60% this year, to \$1.3 billion.

What's behind this European surge? For one thing, Pfeiffer has transplanted the dealer-only strategy that Compaq perfected in the U.S. He has a powerhouse network of European dealers who rely on Compaq to be the first with products using the latest technology. Pfeiffer is also in the right place at the right time: European demand for PCs is soaring an estimated 33% a year, a third faster than growth in the U.S. That's largely because European companies are trying to become more efficient in preparation for a unified European market in 1992.

TOUGH RIVALS. To capitalize on that, Pfeiffer is pushing into more countries. Since April, he has opened subsidiaries in Norway and Denmark, bringing Compaq's European total to 12. In late May, he announced a \$40 million plan to nearly double capacity at Compaq's factory in Scotland. And he's considering a second factory, in

than in the U.S. And Big Blue has cozied up to European dealers by scaling back direct sales and boosting maximum discounts to 43%, above Compaq's 41%. Pfeiffer says he won't play "the margin game." But on June 1, he began offering dealer rebates of up to 2%. Pfeiffer also faces a resurgent Olivetti. "We lost some market share because we were late with key products," says Olivetti Chief Operating Officer

er at TI's German subsidiary. By 1979, he was running it. Two years later, he was in charge of TI's European consumer products group. After moving to TI's Dallas headquarters in 1979, he rose to vice-president. When Canion called in 1983 to check references on another ex-TI employee, he was so impressed by Pfeiffer that he hired him to plot Compaq's overseas expansion beginning in 1984.



Vittorio Cassoni. "We're fixing that."

But Pfeiffer isn't fazed. "He sets very tough objectives and then drives himself and his people hard to meet them," says Stewart Carrell, his former boss at Texas Instruments Inc. Pfeiffer says that some of his drive stems from his unsettled childhood. His father, who fought with the German army on the Russian front, was held in a prison camp until 1948. Meanwhile, at age four, Pfeiffer fled with his mother from Poland to Nürnberg, West Germany, which was rising from the ashes of the war. "Maybe it was then that I developed the need to build things up from scratch," Pfeiffer says.

Like Compaq founder Rod Canion, Pfeiffer started at Texas Instruments. In 1964, he was hired as office manag-

Also like Canion, Pfeiffer is trying to slow his grueling schedule. As senior vice-president, international operations, he heads all Compaq operations outside North America. That means 12-hour days built around frequent trips to the U.S., Asia, and the rest of Europe. Now he's delegating more work and using video conferencing to cut down on travel. Pfeiffer, whose \$893,000 annual compensation is second only to Canion's, even made time during a recent computer conference for an afternoon stroll on the beach.

But Pfeiffer-watchers know he won't let up much. That's one reason Compaq's shares have soared. Analysts are figuring out that Eckhard Pfeiffer delivers.

By Thane Peterson in Munich

salaried and hourly employees. Each team meets several times a month to spot quality problems and to devise and implement solutions.

At the Irvin mill in West Mifflin, a seven-person Apex team devised new ways to remove speckles from the surface of finished steel coils. The temperature was increased for reheating steel slabs, making the steel softer and easier to clean. In addition, water spray guns were freed of particle buildup so that they could evenly clean each steel slab.

Such cooperation helped slash Irvin's customer rejection rate on appliance steel by two-thirds, helping USX's Pittsburgh mills post an estimated \$125 million profit in the past 18 months. "USX has made exceptional progress," says Robert B. Mulhall, a buyer at General Electric Co.'s appliance division. "You don't get quality like Irvin's without good worker involvement programs."

WAR OR TRUCE? This success has spawned an outbreak of cooperation at other mills after the strike (table, page 151). Plant managers now actively seek input from union officials and regularly send hourly workers on visits to customers. At a mill in Lorain, several workers recently visited a Cleveland customer and learned that faulty steel batches had caused the customer to make bad bolts for bridge construction. When they returned to Lorain, a quality team devised improvements in the metal heating process to eliminate the bad batches. "The men feel much more involved and closer to the product now," says union official Pena. "Before, management didn't care about our ideas."

The question is how far such new attitudes can spread. At USX's Fairfield (Ala.) and Fairless Hills (Pa.) mills, managers still rule autocratically. And at USX's huge Gary (Ind.) Works, management has built a truce with one USW local. But it's in open warfare with another over its continued subcontracting. "USX hasn't changed a bit," says USW Local 1014 President Larry Regan, who adamantly opposes cooperation. "They slap you on the back and ask for cooperation with one hand and then stab you in the back with the other by violating the contract." This kind of reaction may be enough to slow, if not scuttle, USX's efforts in the long term.

But there's another possibility. Union officials say that managers do less subcontracting at mills where cooperation thrives. The local managers won't talk about it, but they apparently realize that the company's subcontracting policy undermines the new relationships with employees. If so, the hardliners in top management may find that they have set in motion a process that requires a new approach all the way around.

By Gregory L. Miles in Pittsburgh

Marketing

TOYS

IT'S KID BROTHER'S TURN TO KEEP HASBRO HOT

Alan Hassenfeld must fill big shoes at the toymaker



ALAN HASSENFELD AND OLD PAL MR. POTATO HEAD

Alan G. Hassenfeld must feel a little bit like combat veteran GI Joe right now. In late May, the 41-year-old president of Hasbro Inc. took command of the nation's largest toy company from his brother Stephen, 47, who was hospitalized with pneumonia. Since then, he's been besieged, working out details of the company's planned acquisition of Coleco Industries Inc., worrying about potential raiders, and making contingency plans for moving the company's production out of China.

If any toy company can withstand the pressure, Hasbro can. It has a broad product line, a clean balance sheet, and a cadre of experienced managers. Still, Stephen D. Hassenfeld has been the company's guiding genius. He remains in intensive care, and while the company says it expects him to come back to work, it can't say when. So the question is: How will Hasbro fare in his absence?

Chances are, quite well. Over the past six years, Stephen Hassenfeld has methodically built Hasbro, once dubbed "Has been" by industry wags, into the company with the broadest product line

in the business. Starting with a meager collection of dolls, Hassenfeld branched into board games and preschool toys with the 1984 acquisition of Milton Bradley Co. and its Playskool division. Other smaller deals included licensing pacts (table, page 151) that rounded out a product line that now caters to all ages.

While those acquisitions boosted sales to \$1.4 billion in 1988, from \$137 million in 1983, the company financed most of them internally and remains virtually debt-free. Profits could approach \$100 million this year from \$50 million in 1988, analysts predict, even though sales are likely to be fairly flat in the absence of a blockbuster toy.

Hassenfeld has also put strong managers in key positions throughout the company. In a reorganization last December, he placed veteran executives previously in charge of sales and marketing at the helm of each toy division. "Nobody in the industry has demonstrated the level of brilliance Stephen has," says consultant Sean McGowan, president of Money Inc. in New York. "But Alan will be in a better position to delegate. He's backed by a well-oiled machine." **FLYING HIGH.** Quiet and reserved, Hassenfeld is known in the toy industry as a capable manager. While Stephen was shaping Hasbro, Alan was boosting international sales to \$433 million a year, from \$268 million in 1985. His approach: take a toy that flopped or faded in the U.S., and remarket it overseas as much as four times its original price.

In recent weeks, Alan has seemed to cover all fronts at the company's Pawtucket (R.I.) headquarters. Although one is known to be accumulating shares, a 2½-point runup in Hasbro stock in 1988, following Stephen's hospitalization, prompted Alan and the board to set a poison pill. And while the turmoil in the industry hasn't disrupted operations at the factories there that account for 40 percent of Hasbro's sales, the company has prepared to shift manufacturing elsewhere.

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Far East if necessary, says Alfred Recchia, president of the manufacturing services division. Meanwhile, Hasbro has petitioned theruptcy court to approve plans to Coleco's assets for \$85 million, plus warrants valued at about \$5 million. At stake are such popular board games as Scrabble and Parcheesi, and Cabbage Patch Kids doll line, a one-superstar that has leveled off at a portable \$60 million in annual sales. Cabbage Patch, which peaked at \$600 million in sales in 1985, plays to Hasbro's strength: developing fad products that throw off steady sales profits year after year. Some of the company's most profitable lines, such as Transformers and My Little Pony, are

painful failure was Nemo, a \$20 million video-game project Hasbro discontinued last year. It had hoped to use Nemo to grab a piece of the \$3 billion U.S. video-game business dominated by Nintendo Co. But Hasbro's system was more than twice as expensive as Nintendo's machine, and it failed to impress retailers.

The Nemo fiasco caused Hasbro to retreat to basic toys and more conservative promotional spending. It cut its budget for ads and TV cartoons by 14% over two years, to \$190 million in 1988, and concentrated its efforts on the steady breadwinners. That has yielded some pleasant surprises. Maxie, a wholesome Barbie look-alike, proved more popular than Jem and brought in sales of \$25 million in 1988.

Industry analysts expect Hasbro to be more aggressive with new products now that Lawrence H. Bernstein, the former head of sales, is running the Hasbro Toy Division. He's already moving fast. This September, the company will start shipping Record Breakers, superfast battery-powered toy cars that are hot items in Japan this year. Hasbro didn't show them at the February American International Toy Fair in New York because the company thought boys weren't interested in anything but video games. But after Bernstein saw the reaction to the toys in Japan this spring, he decided to rush them out for Christmas to compete with similar cars from Tonka Corp. and others.

Hasbro is even getting a chance to make some money from video games. In March, the company shipped Marble Madness and World Games, two of five Nintendo cartridges it will market through Milton Bradley this year. Industry sources say Nintendo only made computer chips available to Hasbro once it abandoned the competing Nemo system. The games alone could add \$50 million in sales—and as much as \$20 million to profits, consultant McGowan estimates.

Even if it fails to produce a blockbuster, Hasbro can have a very good year. "Hasbro has shown it can lose money on promotional toys and still make money overall," says McGowan. "That will be the legacy and lesson of Stephen Hassenfeld." It's a lesson the toy industry learned painfully after lack of diversification drove such one-hit companies as Coleco and World of Wonder Inc. into Chapter 11. And it's a legacy that Alan Hassenfeld must now carry on.

By Laura Jereski in Boston

HASBRO'S TOY-SHOPPING SPREE

Division	Year	Price Millions	Toys
HERSCHEL	1983	\$36	Plush toys
MILTON BRADLEY	1984	360	Board games including Candyland and Chutes and Ladders; Playskool toys
PARCHEESI	1985	5*	Board game
CHILD GUIDANCE/	1986	15	Parts of Child Guidance preschool toy line
TOY BALL	1987	5*	Riding ball toy
OPERATION	1987	11	Four games including Operation
COLECO	1989	111**	Cabbage Patch, Scrabble, Parcheesi, ride-on toys, outdoor furniture

*Estimated royalty fees
**Includes \$21 million already paid for some assets, and an estimated \$90 million for pending purchase of most remaining assets

DATA: COMPANY REPORTS, PLAY MONEY INC.

than five years old—Methuselahs of the industry of short-term wonders. Hasbro has kept its biggest product, 13-year-old GI Joe, at \$150 million in sales by giving the line a comeface-lift and a new set of accessories every two years. Even top-sellers, as a \$100 battleship that set sail 11 Christmases ago, may be mothballed after two years to make way for new items.

FIASCO. It's a good thing Hasbro knows how to keep old toys alive, because it isn't as good at coming up with new ones. Over the past two years, the company spent more than \$20 million producing a handful of toys that it ended up dumping from the market. These included Battle Beasts, Visionaries, and an unsuccessful punk-rock rival to Mattel Inc.'s Barbie doll. But the most



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CAN CHARLES SPORCK CHIP OUT A NEW NICHE?

He wants higher-margin markets for National Semiconductor

Industry's gain was National's pain. For the past few years, Charles E. Sporck, chief architect and chief executive of National Semiconductor Corp., has been guiding his creation with one hand. With the other he has been playing elder statesman, lobbying Washington tirelessly on semiconductor trade and industrial policy issues, and prodding his peers to back Sematech, the chip industry consortium dedicated to bolstering U.S. competitiveness in chips.

Meanwhile, National Semiconductor was suffering. Although the Santa Clara (Calif.) company got a bargain when it bought Fairchild Semiconductor Corp. in 1987, merging with Sporck's alma mater generated more heartburn than expected. Worse, forays into new markets mostly stumbled, leaving National dominant in just a couple of standby product lines: chips for processing analog data and high-speed chips used in big mainframe computers.

Unfortunately for National, the markets for analog chips and mainframe chips are laggards in an increasingly digital and desktop world. For the fiscal year ended May 28, National is expected to report a \$185 million loss on chip revenues of \$1.6 billion. Daniel L. Klesken, an analyst with Montgomery Securities, says that National's strategic position has ebbed to where "it's like being a leader in the over-50 league."

FROM SCRATCH. But Sporck is now back at the helm full-time, and he is determined "to make National one of the great turnarounds of the '80s." His game plan calls for rebuilding America's No. 4 chipmaker almost from scratch. As part of the most sweeping reorganization in nearly a decade, Sporck is trimming National back to its core chip business—at least for now.

The new vision for National emerged at a management meeting late last year, when Sporck warned that painful changes were coming. Last December, National sold Datachecker/DTS, a unit that made point-of-sale terminals. And five months ago, Sporck axed National Analog Systems (NAS), a venture into mainframe computers based on equipment purchased from Hitachi Ltd. NAS

was supposed to provide an important outlet and proving ground for National's high-speed chips, but didn't.

Sporck still believes that National must be a player in computer systems. It's important to be intimately familiar with the company's biggest market, he



explains. National has the cash to move up to higher-level systems. Even after paying off some long-term debt with the \$398 million collected from the NAS sale, the company has \$200 million in its coffers. But that cornerstone of Sporck's long-range strategy is on hold until the chip side of the house is restored.

THE CRUCIBLE. To stanch the red ink, National has closed a half-dozen plants. In January, 2,000 employees—some 5% of the work force—got layoff notices. Then several senior managers left. Executive Vice-President James M. Smaha, who headed the Semiconductor Group, took early retirement in March, at age 54. F. Joseph Van Poppelen, 61, who ran worldwide marketing and sales, did the same a month later. The other executive vice-president, David N. Martin, manager of NAS, will soon leave as well.

Sporck is pinning his hopes on the newly formed VLSI Div., headed by Vice-President Raymond J. Farnham. This division will be the crucible for transform-

ing National from a manufacturing powerhouse, specializing in spewing low-cost chips, into a fleet-footed marketer serving higher-margin niches.

Today, National is saddled with many products that pull in gross margins of 5% to 7%, estimates Thomas A. Thornton III, an analyst at Shearson Lehman Brothers Inc. It needs double-digit margins to get back into the major leagues, but far it has had little success at moving upscale. "I just don't see a wave of products coming to pull them out of slump," says a former manager.

Whether Farnham can take the helm is the key question. The 17-year veteran is regarded as a good organizer and efficient manager. Last year, the operation he ran posted double-digit net pro-

But he is untested as a senior executive.

Still, Farnham didn't waste time making some much-needed changes: reoriented National along market niches instead of products. Groups devoted to such markets as local-area networks, telecommunications, and graphics now offer complete chip solutions to customers. Says Farnham: "I look at [the VLSI Div.] as a startup company" that will start off to a \$400 million start.

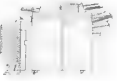
While National should emerge from the red by yearend, Sporck's big turnaround doesn't seem to be in the cards until maybe the early 1990s. "Charles is one of the gurus of the industry," says Robert H. Swanson Jr., president of Fairchild Technology Corp. and a former National executive, "and I wouldn't bet against him. But National is too big to be a one-man show anymore. Unless Farnham can get others outdo themselves in the next years, National could remain a second-class chip company."

By Richard Brandt in Santa Clara,



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Developments to Watch

EDITED BY NAOMI FREUNDLICH

A NEW GIMMICK FOR GETTING WEANED FROM NICOTINE



S smokers who want to kick their habit without chewing bitter nicotine gum may soon be able to cure their craving with a Band-Aid. Several companies, including Cygnus Research, Ciba-Geigy, and Warner-Lambert, are testing so-called transdermal patches that release nicotine so it is absorbed directly through the

skin. Available by prescription, the patches will be worn on the upper arm or torso and replaced once a day during treatment, typically lasting for three months.

Because nicotine is a toxic compound, the patches require delicate tuning of drug flow. The nicotine equivalent of four cigarettes injected into the blood can be lethal, says David H. de Weese, president of Cygnus Research Corp. in Redwood City, Calif. His company's patch is made up of multiple layers that release the nicotine in surges, instead of a steady stream all day long. "We're trying to match the nicotine profile of a smoker," says de Weese. Smokers would wean themselves by using progressively smaller patches. Clinical tests are still in the early stages, so smokers won't be able to try the patches until 1992.

A GUIDE DOG THAT DOESN'T NEED SHOTS

It won't wag its tail or wolf down cans of Alpo, but a robot being developed at North Carolina State University may be a passable substitute for a blind person's guide dog. To figure out where it is, what hazards lie ahead, and what path to take, the robot will have a veritable arsenal of sensors—ultrasonic, electromagnetic, photoelectric, and laser sensors, all linked to an on-board computer. A synthetic voice will warn its master to watch out for potholes or to stop for traffic.

Designed by electrical engineer Ren C. Luo, the robot recently passed a major hurdle by demonstrating that its computer system can integrate and accurately interpret all of the information from the robot's eyes and ears. So now Luo is preparing to mount the hardware on a wheeled platform. He hopes to finish his high-tech pooch in about 18 months. The first model will be about the size of a file cabinet, but Luo believes it would be possible to reduce the size eventually.

WESTERN CHIPMAKERS FORM A SUPERTEAM TO TAKE ON JAPAN

In both the U.S. and Europe, chipmakers have banded together to stay abreast of determined foreign competition. Now, the groups may create a superconsortium. Europe's high-tech European Submicron Silicon (JESSI) and the U.S. group, Sematech, want to form a united Western alliance to stand up to the government-aided chip industries of Japan and other

Asian nations. Talks are under way to grant Sematech members automatic membership in JESSI and vice-versa.

Combining the two groups should yield a potent synergy. Sematech's main thrust is next-generation chipmaking technologies. Meanwhile, Europe's chipmakers, unlike most of the U.S. counterparts, have doggedly refused to abandon commodity memory chips despite intense price pressures from Japan. JESSI's goals reflect that: They include next-generation chip designs, not just production methods.

IBM, an ardent backer of Sematech, reportedly was the mover in launching the talks. Although Big Blue wants to join JESSI, the Europeans are reluctant because they are excluded from Sematech. The obvious solution was to exchange membership privileges.

THESE CANCER-KILLING DRUGS MAY HAVE PERFECT AIM

In the search for the ultimate cancer drug, an important requirement is that the drug kill cancer cells while spare healthy ones. Now, Upjohn Co. says it will soon begin clinical trials on a potent family of drugs that seem to do just that.

They are synthetic versions of a very toxic but powerful cell-killing substance that was isolated from the bacteria in nearly a decade ago. Because the compound is so highly toxic it was almost discarded. But Upjohn chemists managed to separate the cancer-killing portion from the part that's harmful to healthy cells.

What's so special about these compounds is that they seem to react only to genetic material in cancer cells. Put the drug near a cancerous cell, and it will latch onto the cell's DNA to prevent the cell from reproducing. Paul Aristoff, Upjohn associate director of cancer and infectious disease research, says that tests in mice have been very promising. The National Cancer Institute is now working with Upjohn to develop improved versions of the drugs. Meanwhile, human clinical trials should begin next January.

BIGGER FISH TO FRY—COURTESY OF BIOTECH

Raising trout or shellfish is like any other kind of livestock business: Heftier animals bring fatter profits and faster growth. So scientists at the University of Maryland's Center of Marine Biotechnology are looking to speed the growth of fish by enlisting the help of genetic engineering.

They began by extracting a growth hormone from rainbow trout and isolating the gene that makes the substance. Then they tried putting this gene into a carp. Not only did it slip neatly into the carp's own DNA, but the transgenic fish produced the trout growth hormone—and grew 22% bigger than ordinary carp in the same amount of time.

"Now that we know it works, we can extend it to other aquaculture species," says researcher Chunmean Lin. The geneticists have already begun to tinker with catfish, and there is evidence indicating that the basic approach should also work with oysters.





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With the help of their one-of-a-kind computer system, Maxfly Aviation's sales have nearly tripled over the last three years, and it's been ranked among the 100 fastest-growing companies in southwest Florida*. What's next for these high-fliers? International sales, says Scott. Bigger jets and commercial planes, says Don. In any case, ComputerLand has made sure the sky won't be the limit.

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*Business View Magazine, May, 1988

LIBERTE, EGALITE — AND ONE HELL OF A PARTY

The best hotel rooms have long been taken. And getting a reservation in a good restaurant will be difficult. But if you've made plans to go to France to celebrate the bicentennial of the French Revolution, you can still do many things to make sure you have the best of times.

Paris is bracing for what could be a logistical nightmare. In a typical summer month, the capital gets about 1.5 million tourists. But about 3.5 million are expected to descend on the city this July, when bicentennial festivities will be at their peak.

NEW OPERA. More than 200 events are scheduled this summer, from recreations of Revolution period street scenes to what's being billed as the biggest ball ever, held in July to inaugurate the opening of the new Paris Opéra (table). To add to the hectic scenario, French President François Mitterrand has picked July to play host to the industrial nations' economic summit. All seven leaders, including President Bush, plan to participate in the July 14 Bastille Day parade, a prospect that's probably making the Paris security chief more than a little nervous. In hopes of averting citywide gridlock, the center of town—the area around the Champs-Élysées—will be closed to automobile traffic July 12-17.

To help avoid overdosing on Revolution mania, here's a sample of best bets and tips that will make your stay in France more enjoyable:

When you get to Paris, head for the Tuileries Gardens, next to the Louvre mu-

seum on the Right Bank. The park has been transformed for the summer into the official bicentennial visitors center. You'll be able to find out about tickets to specific events and get other useful bits of information. Ten francs (about \$1.50) will get you an English guidebook to the events, available at special information stands at major locations throughout the city.

If you'd rather not hobnob with the revolutionary masses, consider a limousine tour of 1789 Paris. An English-speaking chauffeur will wheel you to all the hot spots of the Revolution, including the site of the infamous Bastille prison and the eerie Picpus Cemetery, where more than 1,000 guillotine victims were dumped in mass graves. The Marquis de Lafayette, a hero of two revolutions, is also entombed here. The eight-hour tour costs roughly \$350 per carload. (Call Jean-Claude Verger, International Limousines, 45-74-77-12.)

Individual and group walking tours, led by English-speaking guides who are experts on the Revolutionary period, are also available for about \$20 per person. (Call Laurie Lesser-Chamberlain, 46-06-24-17.)

WITH FANFARE. The big-ticket events will begin on July 8 with a no-holds-barred American homage to the Revolution. A mammoth marching band, composed of 50 different bands from the U.S., will trek across Paris and head toward the Eiffel Tower, where it will greet a squadron of military planes flying in from New York. A fireworks dis-

play and a river barge concert will follow in the evening.

For a true taste of old-fashioned Gallic fun, plan to be on hand July 13 for the gigantic ball at the new Paris Opéra de la Bastille. After the inauguration gala, the party will spill out into Place de la Bastille where several French orchestras will serenade the dancing crowd until morning. A dozen additional balls will be held that evening in Paris, and café owners around the capital have pledged to dispense for free some of their best wine.

The *pièce de résistance* of the celebration is expected to be the July 14 parade down Avenue des Champs-Élysées. About 7,000 musicians and dancers gathered

from five continents will participate in a special-effects travaganza that will feature the Red Army marching through a snowstorm and British delegation plodding through a dense cloud of rain. The Americans will be represented by a 250-member band from Tallahassee, Fla., headed by Tally Ho! lead singer Dan Byrne. The band plans to moonwalk (dance backward) down the avenue.

The evening will end on a higher note, with American diva Jessye Norman singing *La Marseillaise* in Place de la Concorde.



HIGHLIGHTS OF THE CELEBRATION

JULY 8

The Americans honor the French Revolution bicentennial. A mammoth U.S. band will march through Paris, followed by an evening concert on a barge on the Seine and a fireworks show

JULY 12-16

The infamous Bastille prison tower will be reconstructed, brick-by-brick—at Parc de la Villette, Cité des Sciences, Paris

JULY 13

The "biggest ball in the world" gets under way in the new opera house on Place de la Bastille

JULY 14

Bastille Day parade. 7,000 musicians and dancers from around the world will participate in a special-effects extravaganza. Among the highlights: the Soviet contingent marching through a snowstorm; Talking Heads lead singer David Byrne in his trademark oversize suit leading the American delegation in a moonwalk down the Champs-Élysées. Diva Jessye Norman winds up the evening by singing *La Marseillaise* on Place de la Concorde amid a fireworks display

The best deal in town is probably the special pass to museums and monuments that gets you into major sites in and around Paris without

having to wait in line. One-day passes cost about \$7; a three-day pass costs \$15. The pass gives you access to such blockbuster attractions as the Louvre through its new pyramid entrance, the Orsay mu-

seum, and the Palais de Versailles, which is being refurbished. In July, Versailles will mount an international opera festival and a sound-and-light show documenting the Revolution.

SCIENCE PARK. Plan to check out a dazzling special-effects show on science at the time of the Revolution at the new science park of La Villette. And try to be on hand on July 12-16, when the tower of the Bastille will be reconstructed brick-by-brick. Your museum pass will also admit you to the La Villette center. Passes can be bought in the U.S. through Marketing Challenges Inc., 10 E. 21 St., Suite 600, New York, N.Y. 10010. (In Paris, call 42-77-12-33.)

For those who are nostalgic for the pre-Revolution way of life, there's something for you, too. A few nobles have opened the doors of their ancestral chateaux to guests. One of the most charming is the 14th century Chateau de la Tour, about 150 miles from Paris near the Loire Valley. The Duchesse of Clermont-Tonnerre and her family, who own the castle, live there year-round and play host, often in period dress, to small groups of visitors. Rooms run from about \$75 to \$125 a night, with a \$7 supplement for breakfast. Dinner with the Duchess can be arranged on request. (Call Duchesse de Clermont-Tonnerre, 54-47-06-12. Chateau de la Tour, 36800 Rivarennes-Saint Gaultier.)

The 16th century Chateau de Plessis, also near the Loire region, is another favorite. Rooms start at about \$70, with a \$5 supplement for breakfast. Dinner runs about \$30. (M. Benoist, 41-95-12-75, or write La Jaille-Yvon-49220 Le Lion d'Angers.)

If escape to the sea starts to seem necessary, drive down along the Seine toward Rouen in Normandy to see a flotilla of tall ships from around the world on July 9-16. Or, if you need more dazzle, head for Metz, about 200 miles east of Paris, where on July 26-30 almost 800 hot-air balloons will brighten the sky.

Pia Farrell

works explode around the of Light. few historic locations been transformed into d street scenes for the ner. The Palais Royal disnear the Louvre has also rgone a face-lift. Period s and boutiques have recreated, and wander-ninstrels will be playing summer long. Masked are planned for the gar-of the Palais Royal. **FRANKLIN'S HANGOUT.** Don't the 1789 street scene on age Louis-Philippe in the ct near the Bastille. The there will go on until 13. You can taste 18th ry cuisine at the 300-old Procope restaurant, ldest in Paris, at 13 rue Ancienne Comédie. This to be the neighborhood out of Revolutionary rands Robespierre and on. Benjamin Franklin also an habitué—so much at the restaurant closed day when he died. It offer a special bicen-al *prix fixe* i for about ll summer.



Smart Money

A WAY TO GIVE— AND KEEP ON RECEIVING

Since tax reform, the value of charitable deductions is down—and so are charitable contributions. To boost the philanthropic urge, charities are trying to make giving seem more like investing. One device that is being promoted by all sorts of groups, from CARE to the National Audubon Society, is the charitable gift annuity.

Basically, it works like a regular annuity. But instead of investing your lump sum with an insurance company, you give it—irrevocably—to the charity. In return, it guarantees annual payments at a fixed rate of return over your lifetime. Donors can opt either to begin payouts immediately or defer them to some future point, usually at retirement. As with any an-

nuity. And when the charity reinvests the gift, any income beyond the fixed rate for the donor is money that “the charity gets to keep,” says Laura Kalick, tax manager for Coopers & Lybrand.

The return isn’t the most competitive rate, as the charities readily admit. Most use rates set by the Committee on Gift Annuities, which represents 1,400 groups. The range on immediate annuities is from 6% to 14%, depending on age. A donor at 60 would receive a 7% return and a 50-year-old 6.5%, compared with 8.5% or 9% on insurance annuities now.

BIG BITE. However, there is an instance when “the charitable route will give you more spendable cash than the commercial route,” says Richard Wagner, a Denver financial planner. This would be when a donor faces a big tax bite because of a sudden jump in income, say from selling some real estate or exercising a stock option.

Then, donating “appreciated property” avoids much of the capital gains tax. Say you paid \$40,000 for shares now worth \$90,000. Instead of selling them and paying tax on the \$50,000 gain, give them to the charity and deduct the allowable portion of the \$90,000 value—assume 40%. Only the remaining 60% of the gain is taxable, and even that would be spread out over the years you receive the annuity payments.

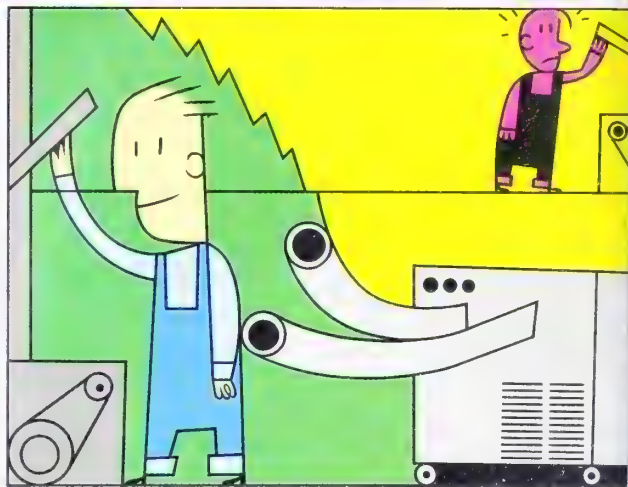
The primary motive for charitable annuities is to give to your favorite cause, not to enjoy a high rate of return. But that doesn’t mean you should throw investment sense out the window. If income is a main concern, you might do better buying an insurance annuity—and leaving the charity something in your will. *Troy Segal*

Charitable annuities offer a big extra —a tax deduction

nuity, part of each payout—usually 50%—is considered a tax-free return of principal. But there’s one big advantage over commercial annuities: Part of the original investment qualifies for a charitable deduction.

The younger you are, and the longer you defer the income, the bigger the deduction. A 40-year-old who buys a 25-year deferred annuity could deduct 90% of the principal, for example, while a 60-year-old who buys an immediate annuity would get about a 49% deduction.

Charities like annuities for several reasons. “It helps us in planning, because we know we have a certain principal amount,” says Angela Sodian, planned-giving officer of the Nature Conservan-



What's In

AIR CONDITIONERS THAT DON'T HOG YOUR WINDOWS

Buyers typically begin snapping up air conditioners as summer starts, but sales on a brand-new type are hotter than high noon in Tempe, Ariz. They’re virtually noiseless and don’t take window space or require a big cutout in the wall. Called “ductless split” air conditioners, they also don’t represent some sort of high-tech breakthrough. It’s simply their design that makes them different.

Unlike window models or central air-conditioning systems, ductless units are split in two. The electric motor and relatively bulky compressor are “roughly the size of carry-on luggage,” says a Carrier spokesman. They go outside. The fan and cooling coils are installed inside, within a grill-like unit that mounts on the wall like a picture. Connecting the two parts are thin strands of tubing that run through a small hole in the wall and along the baseboard to carry the coolant and any runoff condensation.

PRICEY. Such units are common in Japan and elsewhere where homes have baseboard heating and no hot-air ducts suitable for central air-conditioning—and where window space is at a premium. Mitsubishi and Sanyo Electric are

among foreign makers battling Carrier in the U.S.

In general, prices run at 50% more than you’d pay for a top-grade window air conditioner. Most makers’ lists start with a 9,000 BTU model suitable for a room of about 400 square feet. Expect to pay \$1,500 or so, with installation. To cool two or three large rooms, a single compressor unit (18,000 to 23,000 BTUs) can feed coolant to several wall-mounted “evaporator grills” for about \$3,000.

Something simpler and less expensive? How about a portable model that simply plugs into a socket to fill a room with cold air. Looking like humidifiers on casters, they carry such brand names as DeLonghi and Koldwave and cost about \$1,000. Some Koldwave models have “snozzles” to blow a chilling zephyr directly on you while you’re in a garage or even outdoors. Note, though: Condensate collects in a three-gallon container that needs emptying every day or so. Also, when removed from a room where the unit is in operation, it can be shunted outside through a small window opening or another part of the house via a flexible, six-inch exhaust hose, like that used on a clothes dryer. *Don*

BUILT-IN AUTOMATIC ANXIETY REDUCTION

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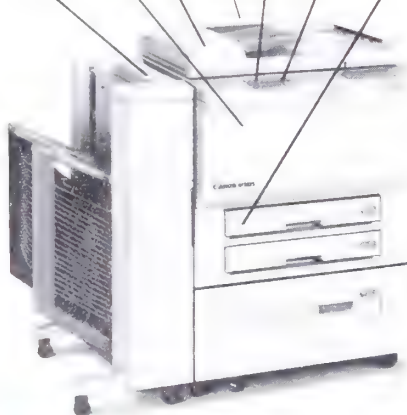
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AUTOMATIC SORTING OPTIONS

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For impecunious status seekers, novelty shops sell the Car Phoney—a \$5 plastic replica of a mobile telephone, complete with a suction-cup antenna. Trouble is, prices on cellular phones have been dropping so fast that almost anyone can afford the real thing.

Just two years ago, mobile phones cost upwards of \$2,000, but new full-feature models are as little as \$500. Yes, Motorola recently introduced a \$3,000 model—its 12-ounce Micro Tac folds to fit into a jacket pocket. But that hefty price tag went against the trend. Such far-flung makers as Finland's Nokia-Mobira, Japan's Mitsubishi, and Oki Telecom in Norcross, Ga., have cut prices by hundreds of dollars. NEC America's top-of-the-line transportable model (P9100) is \$1,299, vs. \$2,395 six months ago.

Behind the reductions is a familiar consumer electronics story: steadily climbing sales that permit mass-market production economies. In *Cellular Subscribers and Forecasts*, researcher Herschel Shostek Associates in Silver Spring, Md., pegs the number of cellular subscribers at 500,000 in 1987, 1 million in 1988, and 2 million this year. Another million will join in annually over the next few years, Shostek predicts, as prices decline further. Already, phone prices have dropped 70% in two years' time, and connection charges have fallen 18%.

CELL DIVISION. Unlike low-power portable phones used around the house, cellular phones transmit radio signals to re-

CELLULAR PHONES TO MATCH YOUR CAR—AND WALLET

ceivers in different areas, or cells, of a city—306 major metropolitan areas at present. The receivers relay calls to other cellular phones or over land lines, to ordinary phones. Before you can make or receive calls, your phone has to be given its own number by a local cellular company. Typically, dealers who sell phones do the paper-

battery in your car or one in a book-size shoulder pack. A handheld portable (\$2,000 and up) fits in a briefcase or roomy jacket pocket, but its small rechargeable battery may allow only 30 minutes of use.

As with standard phones, different makers offer various features. For example, NEC America's mobile M4700



A CELLULAR SAMPLER

Brand	Weight	Features	Price
MOTOROLA MICRO TAC (PORTABLE)	12.3 oz.	75-min. talk time; 120-number speed dial; call screening; call timer, lighted keypad	\$2,995
MOBIRA HANDPORTABLE (PORTABLE)	18 oz.	1.5-hr. talk time; 49-number speed dial; built-in operating menu; car charger	1,995
MITSUBISHI DIAMONTEL 95 (TRANSPORTABLE)	4.3 lb.	2-hr. talk time; 100-number speed dial; automatic redial; dual number capacity	1,350
NEC AMERICA M4700 (MOBILE)	—	Four-number registration capability; hands-free usage; answering-machine option	799

DATA. BW

work for about \$40; it takes a day or two.

Then, depending on your market and volume of calls, you can expect to pay a monthly fee of \$15 to \$50, plus per-minute charges that range from 20¢ at night to as much as 90¢ in peak periods. The average is 34¢ a minute, says Carol Hanson, an industry analyst in Bland, Mo., and the Cellular Telecommunications Industry Assn. puts the average monthly bill at \$98. Of course, if you connect with AT&T or other long-distance carriers, it's extra.

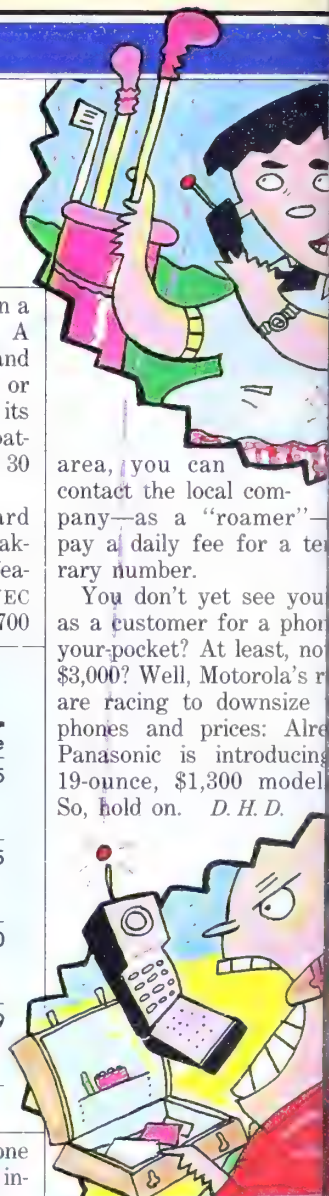
Cellular phones themselves fall into three classifications. Least expensive (\$500 and up) is a mobile unit mounted in your car. A car-or-carry transportable (\$1,000 and up) runs off either the

works like a speakerphone and automatically connects incoming calls after two rings so you talk without taking your hands off the wheel. Mitsubishi's pocketable Diamond-Tel 90X holds 100 names in its memory and speed-dials the numbers. A handheld portable from Oki Telecom sounds a one-minute tone to help you trim time charges. And even if you lock Nokia-Mobira's Handportable 500 to prevent unauthorized use, anyone can use it to call 911.

ROAMERS. Because cellular phones can make and receive calls only in the area where they're assigned a number, some models feature multiple-number capability. Frequent travelers who drive or fly routinely between several cities can have that kind registered with two or more numbers from different companies. Or, when you're visiting another

area, you can contact the local company—as a “roamer”—pay a daily fee for a temporary number.

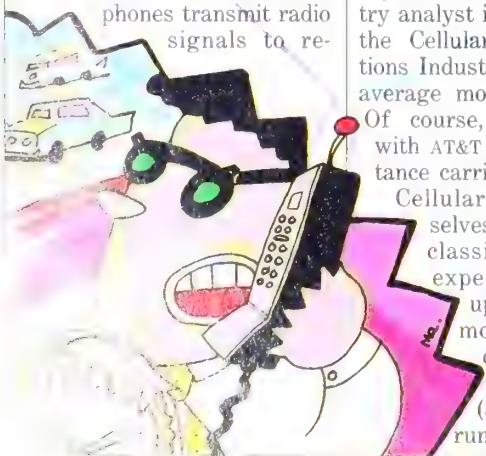
You don't yet see yourself as a customer for a phone in your pocket? At least, not \$3,000? Well, Motorola's are racing to downsize phones and prices: Alrex Panasonic is introducing a 19-ounce, \$1,300 model. So, hold on. D. H. D.



Worth Noting

■ **FAST FAX.** Fax numbers for 35,000 companies are listed in *The National Directory*, \$55 from Pacific Bell (848-8000). It also has phone numbers and addresses for 81,000 companies, 10,000 government offices, and hotels and restaurants in 52 cities.

■ **DIRECT DEPOSIT.** Equifax in Philadelphia has just started an automatic savings plan that lets investors lock in a 8.64% rate for terms as long as 17 years. Monthly contributions to the “Dollar for Dollar” account can be as low as \$20 and are automatically withdrawn from any bank account in the U.S. For information, call 800 825-5226.





**TODAY'S
TAIWAN** **FACING REALITIES,
DARING TO CHANGE**

 REPUBLIC OF CHINA

THE U.S. FINDS A HOT MARKET IN ASIA: WITH MONEY TO SPEND, TAIWAN LOOKS TO U.S. PRODUCTS

What is the hottest growth market for U.S.-made products these days? It just might be Taiwan, the Republic of China. Through the first eight months of last year, sales of U.S. washing machines were up more than 230%; sales of U.S. televisions soared 330%; while sales of U.S. automobiles climbed 250%.

Overall, U.S. exports to Taiwan jumped 90% in 1988. With Taiwan's shipments to the United States actually down by 1%, this bought a massive 35% reduction in the R.O.C.'s trade surplus with the U.S..

Ten years ago, even five years ago, Taiwan was best known as a place to source low cost products. Buyers came, especially from the U.S., in great seasonal migrations, meeting local manufacturers to lay out specifications for goods that could be made cheaply and sold in North America and Europe.

Today, Taiwan is still a good place to source imports and the buyers still come. But there are fewer of them and they are after products in the middle and top end quality range with ever increasing levels of technical and design sophistication. They know Taiwan as where you go to get reliable, high technology products and components. But there is no glut of hotel rooms in Taiwan. If there are fewer buyers, there are many more sellers, especially from the U.S..

Taiwan is a market that wants U.S. products. There are many reasons for the popularity of U.S. brand names in the R.O.C. and the trust Taiwan consumers put in U.S. products. Unlike other parts of Asia, the links between the two economies and societies remain strong. The links range from personal, family and education to social and business partnerships.



TAIWAN BECOMES A CONSUMER SOCIETY

U.S. exports to Taiwan are booming in part because Taiwan has emerged in recent years as one of Asia's most dynamic consumer societies. Imports of consumer products increased four-fold between 1976 and 1986 and have climbed another 150% since then.

Although the island has virtually no natural resources, decades of sensible economic management have paid off. Real economic growth over the last twenty-five years has averaged a solid 9% a year.

But unlike many other newly industrialized countries, from the outset the R.O.C. government recognized the need for the economic gains to be distributed fairly. Today the gap between the rich and poor in Taiwan is the smallest in Asia and far narrower than that found in many advanced countries.



Line after line of US-made sedans

THE R.O.C. TACKLES THE TRADE IMBALANCE

Dedicated action by the R.O.C. government is another reason why sales of U.S. products are soaring in Taiwan today and the trade imbalance between the two countries has begun to tumble.

The R.O.C. government recognizes that a big surplus with the U.S. is not only unacceptable to the U.S., it is potentially dangerous to both economies. Taiwan, for one, cannot risk catching pneumonia everytime the U.S. economy comes down with a cold.

There is also a keen sense of responsibility on the R.O.C.'s part. It is the fifth largest trading partner of the United States. Taiwan's growth benefited enormously from the global free trade system which the U.S. established.

Thus, the R.O.C. government has progressively adopted policies designed to liberalize Taiwan's economy and open more opportunities for foreign, especially U.S. companies, in keeping with the island's increasing prosperity and success.



With the unemployment rate at a mere 1.6% -- possibly the world's lowest -- per capita income now totals US\$6,178 a year. This means that with Taiwan's reasonable cost of living, the typical worker may have relatively more disposable income than his betterpaid Japanese counterpart, for example.

It also explains why Taiwan has become one of the fastest growing markets in the world for cosmetics, automobiles, modern household appliances, high quality entertainment systems and fast foods -- all product and service areas in which U.S. companies excel.

TODAY'S TAIWAN



REPUBLIC OF CHINA

This is easier said than done. Changing a successful economy risks fundamental dislocations and even political unrest. No one likes to have their livelihood put at risk without any apparent need. Yet the R.O.C. government realized its part to help and correct the trade imbalance.

One key step was to encourage Taiwan's exporters to look at other markets besides the U.S. As a result, between 1986 and 1988, Taiwan's exports to Japan and Southeast Asia almost doubled, while shipments to Europe increased more than 100%. This reduced Taiwan's dependence on the U.S. market from 47% to 38%.

THE NT\$ HAS APPRECIATED 50% SINCE '85

Perhaps the single most momentous step the R.O.C. government took in its effort to correct the trade imbalance was to liberalize foreign exchange controls. Instead of being fixed to the U.S. dollar, Taiwan's NT dollar has been able to find its own level.

As a result, the Taiwan unit has appreciated 50% against the U.S. dollar since September 1985. This gain is about twice as much as the rise in the value of the Singapore dollar and over four times the increase in the exchange rate of the Korean won.

Even with these lopsided increases, the R.O.C. government intends to continue loosening the exchange regulations. In March, for example, it removed the residual controls that smoothed out day-to-day currency fluctuations. The aim is to enable the NT dollar reflect its true market value as closely as possible.

In the long run, of course, deregula-



The year's end general election is gathering momentum.

tion of foreign exchange will significantly strengthen Taiwan's economy. It has already begun to hasten the shift from labor-intensive to higher value-added production and, thus, to encourage Taiwan's graduation into the ranks of the world's technologically advanced economies.

However, in the short term, this reform has also brought considerable hardship for many Taiwan manufacturers who have lost markets to competitors in Korea and other low-cost producers.

TARIFFS SLASHED BY 50%

The R.O.C. government has long recognized the need to open its markets to U.S. and other foreign products as fast as local producers were ready to stand on their own feet. Between 1985 and 1987 therefore, Taiwan trimmed duties on over 4,805 items, reducing the average effective duty on all imports to 6.9%, less than half the figure before 1971.

Progress has also been made in loosening import controls and removing non-tariff barriers. A 1987 decision, for example, cleared the way for the import of U.S. wine, beer, and cigarettes. Taiwan has also made it easier to bring in many other items ranging from U.S. motion pictures to fruit, and zinc.



WANTED: U.S. PRODUCTS

At the beginning of last year the R.O.C. government continued its trade reform effort, launching a far-reaching tariff reform that has touched some 80% of the items on the duty schedule. Tariffs were removed altogether from 154 items, including air, water and noise pollution equipment. There are now a total of 454 duty-free items.

For the rest the R.O.C. slashed duty rates an average of 50.2%. Cuts were heaviest amongst industrial products, but also came in agricultural categories. As a result, the average effec-

Taiwan does not rely on better access alone to boost the sales of U.S. products. It makes a special effort to reach out, find and buy goods from the U.S. Since 1978 local businessmen,

under the auspices of the R.O.C. government have organized 14 buying missions to the U.S. which made over \$11 billion in purchases, in addition to regular imports.



tive tariff rate fell to 3.98% only slightly more than the 3.6% figure achieved by the U.S.

Taiwan intends to go further. This month, in fact, the government will again halve duties on some 400 key items. This reflects the R.O.C. government's four-year plan to eliminate the trade imbalance with the U.S. through improved market access, the diversification of Taiwan's export market and the expansion of domestic demand. A measure of this commitment and its success was the 90% rise in imports of capital goods last year.

TODAY'S TAIWAN



REPUBLIC OF CHINA

U.S. COMPANIES ENJOY PRIVILEGED POSITION

U.S. companies also enjoy a favored position in the Taiwan market. More than 40% of the equipment needed on the government's current list of 14 major infrastructure projects, was im-

ported from the U.S. In addition, the R.O.C. government has reserved key elements in its new telecommunications development and the entire \$2 billion subway system for American

manufacturers.

To assist U.S. business, CETRA -- the China External Trade Development Council--not only provides permanent exhibition space, free of charge, to U.S. states and companies, it has also staged exhibitions specifically to promote U.S. products. Last December, 41 states and 311 companies participated in the highly successful U.S. Products Promotion & Exhibition.

U.S. companies also enjoy special advantages in Taiwan's increasingly lucrative service sector. U.S. insurance companies allowed to compete in the local market and the R.O.C. government has progressively widened their scope of operations. U.S. banks and financial service companies have wide access to the local market. Only U.S. shipping companies can establish branches in Taiwan.



KICKING OUT THE COUNTERFEITS

One of Taiwan's most troublesome problems in the early 1980s was its reputation as a haven for counterfeiters. It was a reputation not entirely deserved and not always the fault of Taiwan manufacturers. Many local companies were encouraged to copy foreign products by overseas buyers interested in a quick sale. In recent years, after reaching a total accord with the U.S. on what needed to be done, the R.O.C. government cracked down. It extended patent and trademark protection to foreign products. It granted automatic copyright protection to U.S. authors -- without even the need to register the work. It increased the protection on most videos, films, tapes and photos, from ten to thirty years.

The R.O.C. also enacted a tough law in 1986 that allowed prison sentences up to 3 years and stiff fines for counterfeiters, and then expanded the enforcement effort.

Equally important, the government mounted a sophisticated and lively



R.O.C./U.S. reached copy right agreement

public education campaign, using the media, traveling exhibits and seminars to get the message across that protection of everyone's intellectual proper-

ty rights was essential if Taiwan was going to mature as an economy and develop its own proprietary technologies.



Where East and West meet

A RESPONSIBLE MEMBER OF THE GLOBAL ECONOMY

Taiwan now is the world's thirteenth largest trader and sixth biggest manufacturer of information industry products. On a per capita basis it imports more commodities than any other economy. It has the world's second largest foreign exchange reserves and ranks as one of the world's best credit risks. It has achieved not only strong, steady growth for more than a quarter of a century, but also spread the benefits of that growth throughout society. Today the literacy rate stands at 92% while 34% of all its high school graduates go on to tertiary education.

Taiwan has long endeavored to play a responsible role in the world economy. For many years now CETRA has stationed advisers in developing countries to advise them on how to expand their exports and export-oriented

industries. More recently, the R.O.C. government announced it was going to formalize its commitment to helping other developing nations by establishing a \$1 billion development fund and a \$75 million education fund.

Apart from aid, Taiwan has emerged as a major direct investor. While the island itself still receives much new investment from the U.S., Europe and Japan, businessmen from Taiwan are increasingly adept at spotting good opportunities elsewhere.

This is not the flight of capital. It is the diversification of risk and maximization of opportunities. Some investments provide access to markets. Others move offshore manufacturing which can no longer operate competitively in Taiwan, given rising wages and the appreciation of the NT dollar.

The U.S. has long benefited from this outward investment and last year the flow of investment increased by over 76%. More recently, companies from Taiwan have made substantial investments in Thailand, Malaysia, Indonesia and the Philippines. This has helped accelerate substantially the economic growth; if the trend continues Taiwan will overtake Japan as the largest foreign investor in South-east Asia.

Written By: Andy Krumholz



TODAY'S TAIWAN



REPUBLIC OF CHINA

BUILDING TOMORROW'S TAIWAN



Since the 1960s Taiwan has managed to combine accelerating economic and technological development with social stability. Traditional values and family ties remain strong. Despite the impact of the West, Chinese culture and the arts are thriving.

Taiwan has also been able to accommodate political change, without generating instability. Recognizing that increasing prosperity would bring calls for greater democracy, in the mid-80s the R.O.C. government began a steady liberalization of the political arena. Today at least nine political parties have been formed, several are fairly strong, others may not have much appeal at the polls, but, it is the process that is important.

In reshaping its economy, Taiwan has the ability to see what the realities are and the courage to change. This promises continued stability and growth.

TODAY'S TAIWAN

If you would like to know
more about Today's TAIWAN,
Please contact:



REPUBLIC OF CHINA

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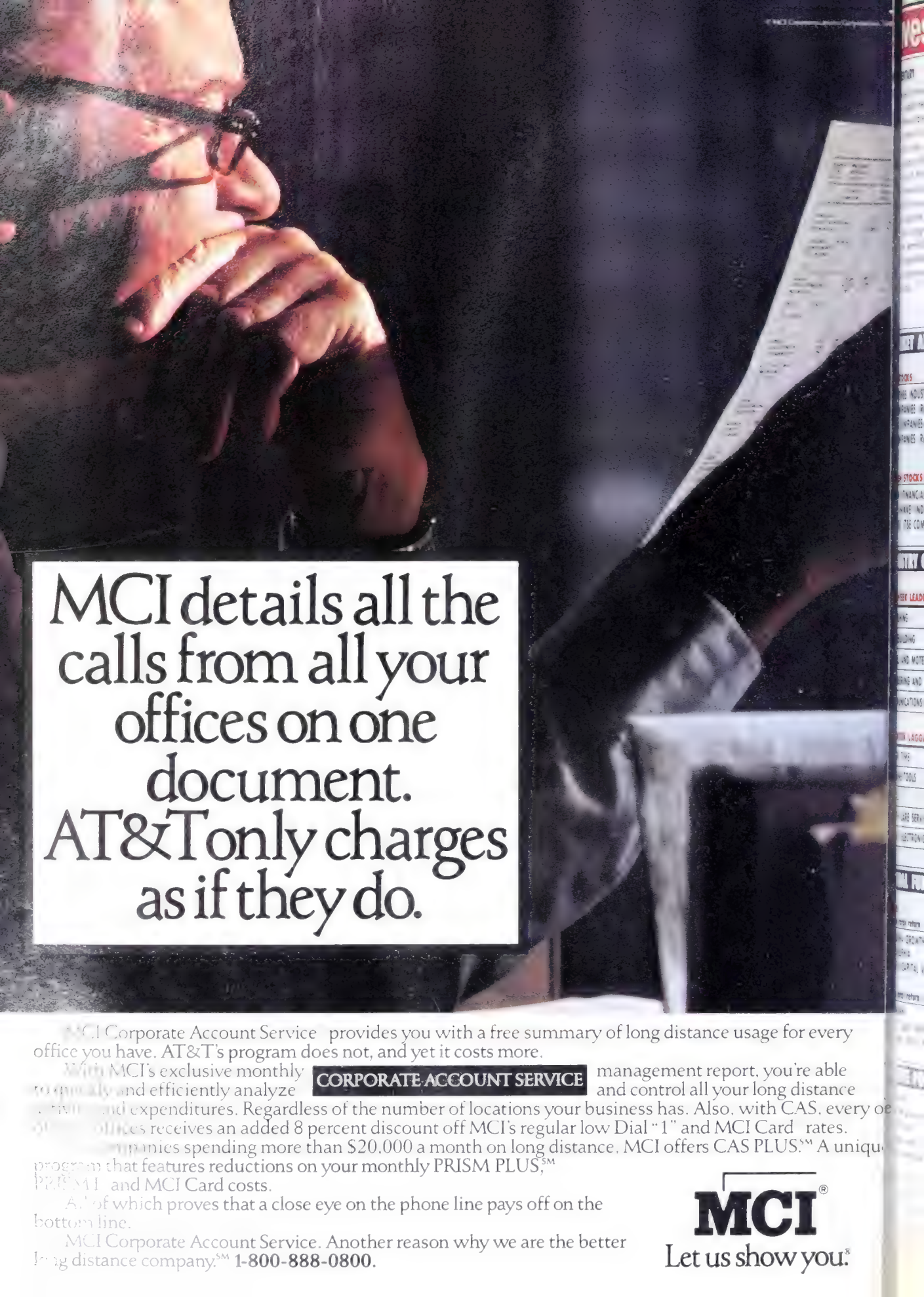


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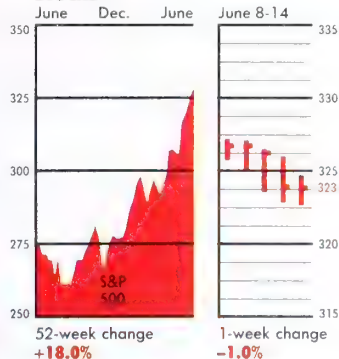
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Investment Figures of the Week

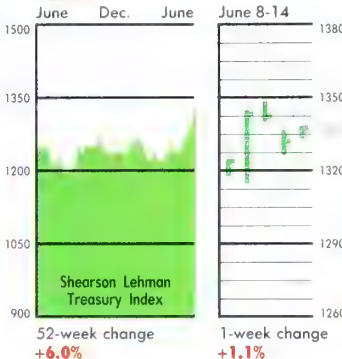
ENTARY

week, stocks were unable to escape the continuing decline in interest rates. Investors, it moved to the sidelines in anticipation of the release of the consumer price index on June 14. Also on their minds was the triple-witching hour, when futures, stock options, and index options expire simultaneously. The strong dollar powered earnings for companies with substantial foreign exposure. Drug stocks, therefore, fared badly.

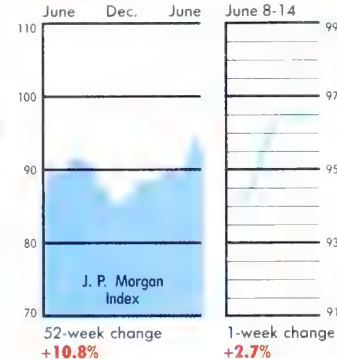
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	2503.4	-0.4	17.5
COMPANIES (Russell 1000)	171.7	-0.9	18.3
COMPANIES (Russell 2000)	172.4	-0.3	16.4
COMPANIES (Russell 3000)	184.4	-0.8	18.1

IN STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
DAX (FINANCIAL TIMES 100)	2133.6	0.7	14.1
NIKKEI INDEX	33,403.0	-0.7	18.9
TSE (TSE COMPOSITE)	3679.7	-2.8	8.2

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	8.4%	8.4%	6.5%
30-YEAR TREASURY BOND YIELD	8.2%	8.3%	8.8%
S&P 500 DIVIDEND YIELD	3.4%	3.3%	3.6%
S&P 500 PRICE/EARNINGS RATIO	12.7	12.8	14.7

TECHNICAL INDICATORS

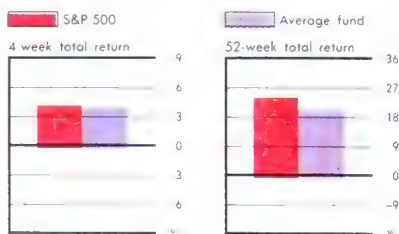
	Latest	Week ago	Reading
S&P 500 26-week moving average	297.9	296.1	Positive
Stocks above 26-week moving average	69.5%	70.6%	Neutral
Speculative sentiment: Put/call ratio	0.21	0.21	Negative
Insider sentiment: Vickers sell/buy ratio	1.84	1.64	Positive

INDUSTRY GROUPS

WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
SHIPPING	18.0	36.0	TIME	50.8	89.5	180
REBUILDING	17.9	60.1	KAUFMAN & BROAD	31.1	66.7	167 1/8
RESTAURANTS AND MOTELS	16.9	47.0	HILTON HOTELS	28.9	97.3	92
ENGINEERING AND CONSTRUCTION	16.3	31.4	FLUOR	20.0	53.8	30 3/4
TELECOMMUNICATIONS EQUIPMENT	10.1	4.2	GENERAL INSTRUMENT	18.1	-6.1	36 5/8
WEEK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
IRE TIME	-5.3	5.7	HANDLEMAN	-14.6	46.2	29 1/4
HEAVY TOOLS	-3.8	-11.5	BROWN & SHARPE	-10.3	-20.5	13 1/8
ALS	-3.7	6.8	INCO	-8.1	-9.5	29 5/8
HEALTH CARE SERVICES	-3.2	-13.6	GENENTECH	-3.9	-30.7	18 3/8
HOUSE ELECTRONICS	-3.0	-0.3	LORAL	-6.6	-13.6	31 7/8

MUTUAL FUNDS

RS	%	LAGGARDS	%
4-week total return		Four-week total return	
ADENA GROWTH	11.5	FINANCIAL STRATEGIC PACIFIC BASIN	-11.2
ADELPHIA	11.1	JOHN HANCOCK WORLD PACIFIC BASIN	-10.4
YFUS CAPITAL VALUE	11.1	MERRILL LYNCH PACIFIC B	-8.7
52-week total return		52-week total return	
FMANN	61.3	STRATEGIC GOLD/MINERALS	-28.9
LITY SELECT BROADCAST & MEDIA	48.7	STRATEGIC INVESTMENTS	-24.6
WARE GROUP TREND	47.9	FINANCIAL STRATEGIC GOLD	-23.9



RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio	U.S. stocks	Treasury bonds	Foreign stocks	Money market fund	Gold
ages indicate	\$12,107	\$11,983	\$11,332	\$10,688	\$7,839
y total returns	-0.26%	+1.97%	-3.23%	+0.16%	-1.70%

on this page are as of market close Wednesday, June 14, 1989, unless otherwise indicated. groups include S&P 500 companies only; performance and share prices are as of market close

June 13. Mutual fund returns are as of June 9. Relative portfolios are valued as of June 13. A more detailed explanation of this page is available on request

PULL THE PLUG ON SKINHEAD POLITICS

On Capitol Hill, they have a name for indiscriminate use of ethics to bash politicians: They call it skinhead politics. The phrase perfectly captures the angry mood of a new generation of Republican street-fighters—men such as House GOP Whip Newt Gingrich (R-Ga.) and Republican National Committee Chairman Lee Atwater.

Gingrich and Atwater are part of a cadre of aggressive young tacticians who are waging an all-out campaign to destabilize what they portray as a corrupt Democratic majority. The score so far includes two major direct hits: House Speaker Jim Wright (D-Tex.) and House Majority Whip Tony Coelho (D-Calif.). At least 10 other Democratic lawmakers have been targeted by Gingrich.

But recently, the GOP jihad has spun out of control. For months, rumormongers have been whispering that Thomas S. Foley (D-Wash.), the newly installed Speaker, is a homosexual. The smear campaign backfired when a top RNC staffer circulated a white paper that urged Foley to "come out of the liberal closet" and compared his voting record with that of Barney Frank (D-Mass.), an openly gay member of the House. The aide quickly resigned, Atwater apologized, and President Bush pronounced himself "disgusted" with the assault on Foley. Case closed.

Or is it? Throughout his political career, George Bush has proclaimed his respect for those who take the high road. At the same time, he has assembled a crew of fierce political infighters ready to occasionally work over the opposition. Cases in point: the artful mugging of Kansas Senator Bob Dole on the eve of the New Hampshire primary and the later attempts to circulate rumors about the mental stability of Democratic opponent Michael S. Dukakis.

Rather than distancing himself from the skinheads' latest below-the-belt assault, Bush should take responsibility for it. The fact is, he has precisely the kind of GOP he wanted: kinder and gentler at the top, rough-and-tumble at the politi-

cal operative level. He needs to call his young surrogate for a chat, inform them that the fall campaign is over, show that he means what he says about a new bipartisan spirit by punishing those who don't get the message.

Beyond that, both Democrats and Republicans have to find ways to put the current partisan frenzy behind them. One way would be to get at the root of the problem and finally do something about the scandalous way in which campaigns are financed in this country. Political action committees (PACs) are spewing a flood of money into the political system. That in itself is a corrupting influence.

But for years, Democrats and Republicans have been unable to tackle this problem head-on. Democrats favor public financing of congressional elections, which ought to end dependence on special-interest money. Republicans love that approach and instead talk of eliminating PACs and enacting limits on individual contributions—a change Democrats feel, favors better-heeled GOP donors.

Both sides need to bridge their differences and focus on the blatant abuses in the current system. The practice of shuttling "bundled" PAC contributions to state and local ties, a ploy aimed at evading federal spending limits, should be ended. A loophole that allows lawmakers to convert excess campaign funds to personal use when they resign should also be closed. And the porous rules on "independent expenditures," rules that supposedly prohibit outside financial groups from coordinating their giving with official campaign committees, need to be stiffened and enforced.

Here, Bush has an opportunity to provide leadership. White House aides are reportedly considering some for PAC reform measures and could come out with a package of options soon. It would be a perfect time for the President to lend his hand to cleaning up the campaign finance cesspool—and to bring the era of skinhead politics to a welcome close.

AFFIRMATIVE ACTION AIN'T BROKE, SO . . .

The Reagan Revolution at the Supreme Court is picking up steam. That is clear from the justices' rulings on affirmative action. For eight years, the Reagan Administration fought unsuccessfully to reverse the court's steadfast backing for hiring and promotion plans aimed at ending racial discrimination. Now that support is crumbling.

The latest move came on June 12. In a 5-4 decision written by Chief Justice William H. Rehnquist, the court ruled that white fire fighters in Birmingham, Ala., may challenge a court-approved affirmative action plan that they said illegally discriminated against them on the basis of race. Earlier this term, the justices had tossed out city programs that set aside a percentage of contracts for minorities. And more recently, the court made it harder to prove discrimi-

nation based on data about an employer's work force.

An even more important case involving a private employer is expected shortly. The court is pondering whether to overturn a 1976 ruling that a century-old civil rights statute be applied to bar discrimination in private contracts. If the court changes its mind, minorities won't be able to sue for damages in discrimination cases.

The court is moving down a treacherous road. Most of the nation, except for die-hard Reaganites and a few members of the judiciary, has accepted the notion that employers must take extra steps to overcome the effects of past discrimination. The justices should think long and hard before tampering further with a system that by now is part of the social fabric, is accepted—and is working well.

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